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The Council of Industrial Design November 1953 No 59 Price 2s

Scandinavia's biggest civic centre uses Tygan

It is easy to understand why colourful, sparkling Tygan was chosen for the upholstery in the new Aalborghallen in Denmark. Tygan won't mark, scratch or stain. It can be sponged clean with a damp cloth. It is moth-proof, rot-proof, damp-proof. The colours are fast. In short, Tygan is attractive in more ways than one where wear is bound to be heavy.

Tygan, a tough woven monofilament fabric, is being used most successfully on chairs for home, hotel or office as well for seating in cars, aeroplanes, theatres and bars.

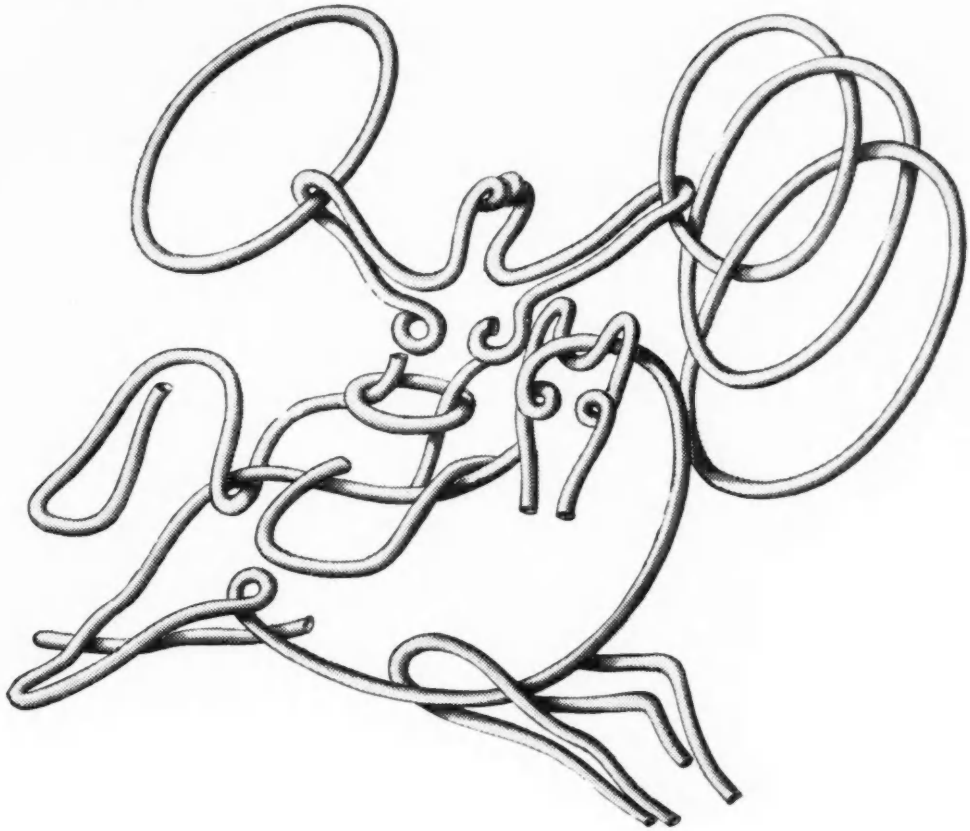
Tygan

REGD

Manufactured by Fothergill & Harvey (Sales) Limited

Harvester House, Peter Street, Manchester 2

TI is movement



TI, through its range of manufactures, is concerned with the details of mechanical movement . . . from the speed of a plane flying faster than sound to the power of a truck shifting ten times its weight . . . from the flash of a bicycle downhill to the ceaseless activity of some very small component, so balanced that it does not appear to be moving at all.

TI is a group of interrelated engineering companies whose manufacturing activities are wide, including precision tubes, components for cars and ships, aeroplanes, locomotives, wrought aluminium, bicycles, metal sections, pressure vessels, electrical equipment and appliances, mechanical handling, machine tools, gland packings, bus body framing and seating, paints, road signs, tubular furniture.

TUBE INVESTMENTS LIMITED, THE ADELPHI, LONDON, W.C.2. Trafalgar 5633

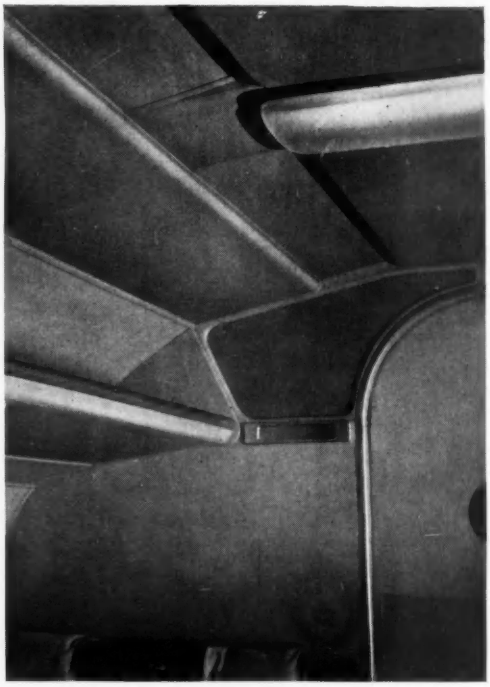
Photographs by courtesy of the de Havilland Aircraft Co., Ltd.

'Vynide' REGD.

(made from 'Corvic' P.V.C. polymer)

again chosen for the Comet

Selected for the Comet Mark 1 and used throughout its production, 'Vynide' has again been chosen by de Havilland for panelling their new Comet Mark 2. Here is further testimony to the high quality and durability of 'Vynide'—and to its increasing use in Britain's leading aircraft. 'Vynide' P.V.C.-coated fabric is made solely by the Leathercloth Division of Imperial Chemical Industries Ltd., from 'Corvic' P.V.C. polymer manufactured by I.C.I. Plastics Division.



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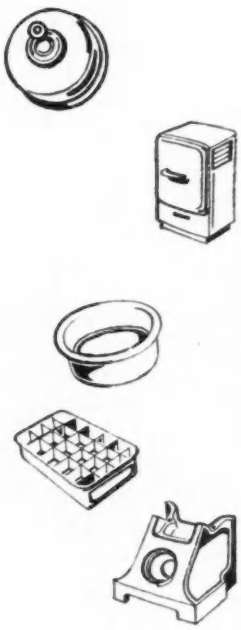
ICI

IMPERIAL CHEMICAL INDUSTRIES LIMITED, LONDON, S.W.1

V.4

from A to Z...



A *is for Anything plastic we make*
B *is for Bottles that simply can't break*
C *is for Clock a most stylish production*
D *for Designing to your own instruction*
E *for Electrical fittings we mould*
F *is for Fridges to keep your food cold*
G *is for Games and the toys we make, whole*
H *is for Home and the plastic sink bowl*
I *for the Inserts we put in their places*
J *is the Joy on our customers' faces*
L *is for Toilet Seats, Lampstands as well*
M *is for Moulding at which we excel*
N *is for Now if our service you need*
O *for the Orders we tackle with speed*
P *is for Plastics and Ekco's the name*
Q *is the Question we gladly explain*
R *for the Radio cabinet smart*
S *for a Switchbase or Suchlike small part*
T *is for Telephone, hand, G.P.O.*
U *is for Urgency— jolly good show !*
V *is for moulding for ships' Ventilators*
W *for Washing machine agitators*
X *for Extrusion if such is your need*
Y *is for You from your troubles thus freed*
Z *for our Zeal and our Zip, Zoom and Zest.*
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DESIGN for December

Drawing office equipment

DESIGN POLICY
in British Industrial Plastics Ltd

Current designs for Christmas gifts

Design

'Modern UK' and BIF

FROM THE REPORTS THAT HAVE come back from Canada and from the many hundreds of recorded comments by members of the Canadian public, it seems that the Board of Trade stand 'Modern U K' at the 1953 Canadian National Exhibition in Toronto struck a really new note. The purpose of the stand, which showed over 500 selected British goods, was to promote, in a market that is already very conscious of modern American designs, the up-to-date products of many British manufacturers who treat good design as a vital factor in sales appeal.

The display showed that, for all our reputation for excellent traditional design, 'modern living' is no American monopoly. From many comments it appeared too, that modern British design has a warmth and friendliness that is sometimes missing in contemporary work. A young American couple, for instance, noted that our furniture and furnishings are less austere and more homely than theirs; they called our pieces 'traditional modern', which may be another way of saying that the British character in design can come through without recourse to period imitations.

The immediate need is to exploit commercially this policy of selective exhibitions. Not enough British manufacturers who are producing these interesting new designs have built up effective sales organisations overseas; not enough of their goods are yet on view in the shop windows. Americans and Canadians are not conditioned to tomorrow and tomorrow and by and by. These selective displays at national exhibitions must be backed up by the manufacturers themselves. When foreign buyers visit their showrooms the new designs must not be hidden away in a corner on the out-of-date assumption that the buyers are interested only in our traditional patterns. And the new designs must be the work of first-rate designers. Nothing less is good enough.

Another opportunity to win export business for new British ideas will be given at next year's British Industries Fair. The Council of Industrial Design has been invited to join with the Board of Trade in staging as the central feature of the Earls Court exhibition a selective display covering many industries. As at Toronto, the majority of the exhibits will be chosen from 'Design Review', the Council's illustrated index of good current designs. There is still time for many manufacturers to raise their sights and submit their best work for this unique occasion – the first good design exhibition to be staged within the B I F.

POINTS and POINTERS

MILE END MODERN One of the largest stores in the Mile End Road area of London is carrying out an experiment. Wickams Ltd has for some time provided its customers with a cafeteria service; an attraction which might be improved if redesigned with modern furniture and fittings. Wickams turned to Carl Fisher and produced a scheme which to enclose the cafeteria on three sides, one of which is a long glass screen, Hille furniture was introduced for the main eating area and new cooking and heat storage equipment was built into the counter unit. The experiment became a major success in the first three months when the cafeteria produced almost 100 per cent more business than its previous best.

TO LET, FURNISHED We were invited recently to a large and rambling house in Hampstead – big enough for anyone with a family of Victorian proportions, but scarcely suited to the one man who owned it. His reaction to the problem suggests that Hampstead and other London areas crowded with *petit bourgeois* 'mansions', could bring a new life to their interiors which both pleases and pays. Instead of fixing two dozen bell pushes to the front door and equipping each room with a few sticks of fifth-hand furniture, he commissioned a designer to overhaul the entire living area. The house now contains six flats, furnished and decorated in a co-ordinated scheme peculiar to each. They have all been let to clients whose taste for American modern may be a little in advance of ours. But the owner's flat on the ground floor is certainly a spirited essay in transatlantic taste. The designer is Geoffrey Bocking and the work was carried out by The Wilmington Workshop.

TELEVISION'S TRADE MARK A new screen symbol is likely to replace the familiar B B C coat of arms very soon. It is to be based on a working device, designed by Abram Games, and a model is to be filmed in motion before reproduction on the T V screen. The B B C intends the symbol to become the trademark of its television service, capable of a variety of uses in different sizes, from notepaper crests to large scale designs.

WHAT RETAILERS WANT Canadians are looking to the United States to get supplies of inexpensive pottery of modern design. This point was made by a Canadian attending the recent course for buyers and salesmen of pottery held by the CoID at Stoke-on-Trent. He said that traditional English patterns by no means filled the demands of the Canadian market which, like that in the United States, carried on a brisk business in modern designs. With support from the home market growing stronger every day, it appears that British potteries still need to grasp fully the implications of the modern movement.

At the same course a buyer from Bristol complained that even there he could not get the modern designs he knew he could sell. In order to keep his shop going he had to take what manufacturers could give him which, for the past year, had consisted of the familiar traditional designs.

To sum up the course came a leader entitled 'Contemporary Pottery' in the Stoke-on-Trent EVENING SENTINEL. Having attended the open forum at the end of the course the writer was impressed by retailers who stressed the need for more modern pottery. "If there is a serious miscalculation about 'what the public wants' ", he said . . . "the manufacturer – and his employees – will suffer most."

DESIGNERS FROM THE RECORD

C. G. Tomrley *

Picking the right designer for a particular job would present a difficult problem to many firms, if a short list of names could not be provided by an impartial body. The Council of Industrial Design keeps a comprehensive record of designers, and manufacturers who consult it can be directed towards the most suitable candidates. In this way time is saved and design work more speedily begun.

The design advice service has been operating for more than seven years and its own record of success is described in the following article with photographs to indicate the range covered.

TO MAINTAIN A RECORD OF DESIGNERS, believed to be the only one of its kind in the world, was one of the objects of the Council of Industrial Design when it was set up in 1944. In seven years the Record has been built up to contain more than 2,000 names and the interviewing of designers with examples of their work continues.

The Record has been handling more than 300 requests a year from industry for the names of suitable designers, and the traffic is growing. Out of about 300, between 50 and 60 concern products of the engineering industries and about an equivalent number the craft-based products, for example, furniture and textiles.

A record card was devised which describes designers in the broadest way possible so that the placing of an individual in a limited category may be avoided. The basis of inclusion is also broad, besides specialists the Record admits designers, ranging from engineers undertaking the appearance design of complete units of equipment to fine craftsmen who will work directly or indirectly with industry. It includes graphic artists suited to commercial work and sculptors, modellers, typographers, letterers, etc, whose work now has applications in display, in the design of trademarks or at the finer end of commercial lettering, printing and

* *In charge of the Record of Designers, Council of Industrial Design*

die-sinking. It includes such 'fine artists' as will engrave, paint murals or carve a piece of sculpture for a purpose, and also architects with experience of interior or exhibition design or of designing furniture or fittings for industry.

Staff designers, free-lances and consultants are included. It is not, of course, correct to assume that staff and independent designers are different kinds of being. In fact, many individuals turn from one to the other. The art schools are beginning to supply students trained as industrial designers, a profession both new and, so far, ill-defined. Very properly these people enter upon a period as staff designers before joining the offices of consultants as a step towards becoming free-lances and consultants themselves in later life. The qualified ex-student is welcomed to the Record of Designers and many successes have been scored in suggesting the right man for junior staff posts.

In August 1953 the staff designers recorded represented about one-fifth of the total number. The Record does not normally find senior designers in industry staff posts in other firms, because of the risk of robbing one firm to fill a vacancy in another. It is, however, active in finding candidates for the less responsible positions in industry. In addition the Record is preparing a list of potential candidates for design directorships for use when firms' revised design policies shall include such appointments. In apparently concentrating so much on the supply of free-lance and consultant designers the Council is not, *ipso facto*, promoting the view that the improvement of British goods is likely to be effected better or more quickly by the use of outside men. The reverse may well be true, taking the long-term view.

Design policy advice

The responsibilities of the Council in giving this service are therefore great, and in many cases the pooled experience of senior officers is put at the disposal of the enquirer. All conversations are, of course, treated as confidential and each enquirer manifestly benefits from the staff's experience of projects of many different kinds that have gone before. In fact, private discussions on design policy are an important service which the Industrial Division of the Council can offer manufacturers. They can range from an informal talk about the best method of obtaining certain specific short-term results to an investigation involving visits to the works and the preparation of a critical survey of present practice and future possibilities. Such an investigation need not lead to the suggestion of new design talent, since there is often latent design ability within a firm which can be freed by reorganisation.

If a request involves the need for a designer or designers, the staff which maintains the Record will elicit the enquirer's wishes in some considerable detail before providing the short list of carefully chosen names. Behind each selection there lies a knowledge of the designers not only as performers in their own sphere but as individuals whose tastes, temperament, status, past history and preferences must be taken into account. For this reason the more complete the statement of requirements, the more accurate will be the selection of designers. This preparation of a short list of names represents one of the chief benefits of the service. No enquiry is too trivial to merit the attention of the staff concerned and provided that the request can be accurately formulated, the service is immediately put into action for any enquirer free of charge and obligation.

The growing profession of industrial designer has been suspect to many people, especially to those with a comprehensive technical training. Such people are in fact often more inclined to accept an 'artist' who could do sketches which the firm could adapt than the composite artist-technician which the name 'industrial designer' implies. It is hoped that this article will help to dispel some of the erroneous ideas which have clouded relationships between executives in industry and the person qualified by nature, training and experience to apply his gifts to special functions within industry.

One of the reasons for the emergence of a definite profession, with its own representative body, the Society of Industrial Artists, has been the need for a code of professional conduct to govern the practice of its members. Those employing designers entitled to the suffixes FSIA, MSIA or LSIA can rely on the professional integrity which these titles imply, and members will furnish prospective employers on request with a copy of the code of professional conduct and appropriate conditions of contract as laid down by the S I A.

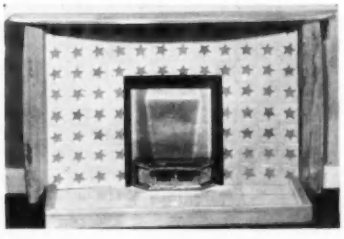
The Council's Record of Designers endeavours to investigate its results. The pages of illustrations which accompany this article give a selection of the work known to have been completed as a result of the recommendation of designers from the Record. Much further work is of course in hand, and will be illustrated later in the pages of DESIGN.

Coronation year BRITISH INDUSTRIES FAIR STAND *designed for the National Wool Textile Export Corporation by Neville and Mary Ward, assisted by Alec Heath as display designer, and Alick Smithers and Cockade Ltd, who produced wire sculpture and royal emblems respectively. This stand was the culmination of a number executed by the architects for the Corporation here and overseas. It echoed simply and without extravagance the dignity and splendour of the royal occasions of the year.*

A SIMPLE, BOLD STAND FOR THE PACKAGING EXHIBITION 1953 *designed by Gordon Bowyer for Read's of Liverpool, manufacturers of cans, containers, drums and canning machinery. The designer has produced a setting proper to the exhibits which is, at the same time, human in scale and feeling.*

FROZEN FOOD COUNTER *designed by H. A. Nieboer for Savage & Parsons Ltd. In order to compete effectively in overseas markets, the price of this counter had to be brought down below that of existing British models. This was done by economies in tooling and production processes made possible by the closest collaboration between the consultant designer and the firm's staff.*

FULLY AUTOMATIC BURNER *using crude oil for applying heat to a domestic boiler. It was designed for Nu-way Heating Plants Ltd by Richard Huws. Its purpose is the conversion of a boiler to oil-burning by simple and economical means.*



FIREPLACE, *one of a series produced by F. C. Meadows (Fireplaces) Ltd, in an endeavour to meet the needs of architects for contemporary interiors. David Pye designed the wood surround, and Mrs Peggy Angus the tiles, which are manufactured by Carter & Co.*

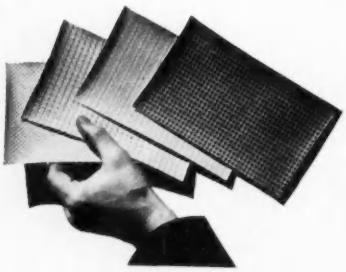
PIANO *designed by Frank Austin of Ward and Austin, for W. Danemann & Co Ltd. This commission was the result of the success here and abroad of the designer's previous piano produced for the LCC School Equipment Division especially for their new schools.* (*See* DESIGN *January page* 26.)

BUYER'S DESK AND CARPET *designed specially by Misha Black, Alexander Gibson and Norman Whicheloe of Design Research Unit, as part of the interior decoration of Peter Robinson's Oxford Street store. It gives an air of privacy without losing effectiveness as the centre from which the buyer controls her department.*

Two of a continuing series of EASY CHAIRS AND FIRESIDE CHAIRS *designed by A. J. Milne for E. Horace Holme Ltd. This family of chairs has so marked an elegance that it is possible to recognise them despite the growing similarity of contemporary upholstery.*

SCHOOL FURNITURE *designed by Dennis White for the Hertfordshire County Council. Mr White was appointed to the Architects' Department under C. G. Aslin to pursue in school furniture the research and development which the architects have undertaken in other branches of school equipment. The dual table desks were designed with an especial eye to strength combined with simplicity of form. They were made in abura also for the Hoddesdon School, by Gordon Russell Ltd. The chairs stack and give back support for working positions. They are made in beech by William Birch Ltd of High Wycombe.*

LOUNGE *in one of the London County Council's homes for aged men and women at New River Lodge, Stoke Newington, designed by Phoebe de Syllas. Mrs de Syllas was first commissioned by the LCC to advise upon the choice of furnishings and co-ordinate the interior design of homes for the aged in* 1949 *and has since worked on about* 12 *other homes. During this time the LCC has built several new homes and has developed an increasingly progressive policy which gives greater opportunities to the interior designer.*



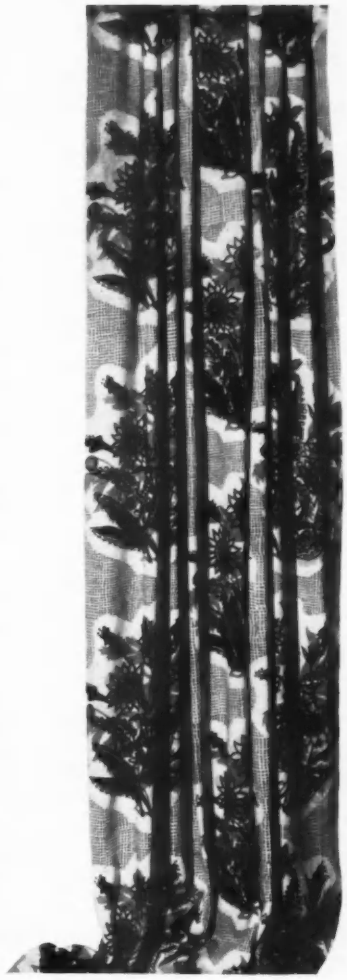
PLASTIC CLOTH *designed by Charles Garnier for Imperial Chemical Industries, Leathercloth Division, to which he was appointed in* 1949 *to devise new treatments and applications for leathercloth. An extensive range of new textured and other cloths has resulted.*

A part of the INTERIOR OF A SALES VAN *designed by Cyril Denny for the British Vacuum Flask Co. The designer has given particular attention to the security of the samples while arranging for their easy removal and demonstration.*

SWITCHFUSE *designed by Ivor D. Martin for the Midland Electric Manufacturing Co Ltd. The recessed switch lever does not project beyond the front of the case, thus reducing the danger of accidents.*

A SOAP ECONOMISER *in enamelled die-cast aluminium designed by Jack Procter for N C K Products Ltd. It contains a concentrated jelly-like soap and when the fish-tail plunger is pressed upwards, a small jet of soap is ejected into the hand from between the prongs.*

OIL-BURNING CONVECTION SPACE HEATER *designed for Joseph Sankey & Sons Ltd by F. D. Holister and John Barnes of Allen Bowden Ltd. This heater is the second to be designed since the firm's appointment as consultants to Joseph Sankey & Sons Ltd. Both have represented a considerable departure from standard practice in the design of domestic oil stoves.*

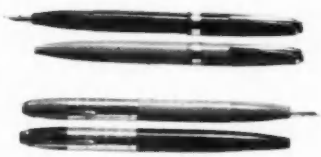


PRINTED FURNISHING FABRIC *designed by Sylvia Priestley for Molnlycke Textile Mills Ltd, Sweden. The firm's buyer has consulted the Record for three successive years and usually buys British designers' work as a result.*

BOTTLE LABELS *designed by Lewitt-Him as part of a considerable series for the mineral waters and fruit drinks of Schweppes Ltd. These labels were conceived with the programme in view and are capable of many changes of their bright, clear colour within each range, as well as of variations of theme to correspond with the different major lines produced by the firm.*

THE BRITISH FARMER, *a monthly newspaper published by the National Farmers' Union, before and after the alteration in layout and typography effected by B. G. Yates. It was produced in support of a new and lively editorial policy. A worthwhile innovation was the addition of two colours, a bottle-green and a lime-green.*

BISCUIT TIN LABELS *designed by George Collett for Meredith & Drew Ltd. This band and top label were part of a series intended for the American market. The colours are light blue, deep red, olive green and yellow green: a four-colour printing giving the designers great scope.*



TWO WYVERN PENS *designed by Kenneth Brayshaw several years ago which have been successful on the market. The Wyvern Pen Co has since given the designer other commissions.*

GPO

SYMBOL *for the new reign designed for the General Post Office by Stuart Rose. It replaces on G P O publicity material the circle with letters and crown designed by Macdonald Gill in 1933. The G P O wished the new symbol to have a recognisable resemblance to its well-known predecessor as well as to be of characteristic contemporary design.*

John Harper and Co Ltd

Jock Kinneir

Some engineering firms employ consultant designers. Some rely entirely on their own design staff. The merits of each procedure will continue to be argued, but a third course may offer a profitable compromise.

'BEATRICE', BORNE SINCE 1899 on oil heaters and a dozen other domestic articles, is a name probably better known to the public than that of the makers, John Harper & Co Ltd. An unremitting insistance on quality coupled with a genuine modesty are responsible for this, and sketch the background of an industrial portrait typical of the English Midlands. Founded by John Harper in 1790 to produce iron castings and hardware, and for long engaged principally in the lock and key trade, the firm is still a family affair, presided over and managed by Harpers, although since 1930 converted into a public company. Major extensions to the foundries in 1850 and again in 1951 reflect the country's years of industrial growth. In 1856 the firm was able "to offer plain and ornamental light castings to any pattern, either malleable or common iron". Today over 10,000 tons of castings each year are sent out to a variety of engineering undertakings in addition to the domestic appliances.

The great technical competence shown in this side of the work has over 160 years of accumulated experience behind it; an experience enriched by the demands made on it by the intricacies of Victorian design as well as by a hardheaded understanding of

the real meaning of craftsmanship, so far removed from the prestige advertisements' gnarled and aproned personification 'going it alone'.

The increasing cost of these complicated and heavily decorated designs, together with the demands of the new mass market for cheap goods, brought the inevitable change. The 'Cathedral' stove, **1**, lingered on, unique but still loved, until 1923. Now the current brochure can confidently state that "the test of a good casting is its ultimate cost to the user". But simplification was not necessarily rationalisation. And rationalisation when it came did not always improve the appearance of the goods. It was therefore inevitable that the management in its battle for sales should at last consciously formulate a design policy. The way this was shaped was, and still is, largely an engineer's way, though tempered with that characteristic modesty already noted.

Evolution of new designs

Just after the last war Harper's directors decided to reconstitute the Development Committee and the Development Section, first set up in 1936 but dissolved three years later because of the war. The committee now meets at about two-monthly intervals and consists of the managing director and his wife, the sales manager, the works manager and the development engineer. It is worth noting *en passant* the inclusion of a housewives' representative and the fact that the design member is called an engineer.

Ideas for new designs come to this committee from a variety of sources. The sales division will feel that it should anticipate a waning public interest in one particular line. A sagging sales record will reveal the need for stimulation or an outside representative will report competition. If the development committee decides that a new design is justified, a Development Request, as it is termed at Harper's, is issued to the development section. The request is a specification of performance to be achieved, and on it the development engineer and his two chief assistants will work to produce 'visuals', a mock-up or even a working model. If the first stage were a 'visual' the next one would be a prototype hand-made by the development section from its own working drawings. This conveniently tests the drawings. The prototype will next be costed by the works and will go with a test report to the development committee. If it is considered promising a decision to produce a pre-production batch of a hundred is taken, involving the issue of complete tool and pattern orders. This batch will be subjected to the most critical tests which may even result in the whole project being abandoned. If, however, management, works and sales representatives agree to go forward, the verdict of outside organisations is sought. Household appliances go to the Good Housekeeping Institute, gas appliances go to the North Thames Gas Board's research organisation at Watson House, and oil appliances to the Fulham Laboratories of Shell Mex Ltd. Their reports are technical ones dealing with performance; for example, heat output from stoves or the amount of food which a mincer can reduce in 100 turns of the handle. User convenience may also be dealt with, but design seldom. Before being issued to the trade the new product may be field-tested for a further period of months in selected households outside the firm.

Colour is a matter deserving special attention. The development engineer is responsible for originating colour schemes, which then pass to the committee where the managing director's wife exercises her acknowledged flair. Sometimes colour schemes are subjected to a straw vote. Items from the pre-production batch with different finishes may be exhibited in the foundry so that the workpeople can have the opportunity of balloting or passing comment. Throughout the whole process emphasis is placed on testing. The procedure is deliberate and lengthy, and avoids wholesalers and retailers being loaded with a plethora of different models.

To consult or not

The procedure already outlined is not a rigid one, and an examination of the occasional employment by Harper's of consultant designers outside the industry is stimulating. Raymond Loewy has been responsible for two designs produced by the company, the No 3153 kitchen scale, **12**, and the current No 4012 oil heater, **5**. Both these, it may be noted, are essentially exercises in recasing. The designs are discussed in detail in the captions, but after a glance at these two products it is interesting to look at the No 500 scale, **14**, and the range of mincers, both of which were developed within the company. The development section, operating in a drawing office, well-equipped workshop and test laboratory, would seem to have an advantage in this over the outside consultant. The section has produced good-looking articles which work well.

Why should a board go further? If even the designing engineers of Harper's admit that they have technicalities yet to learn, why go to an outside consultant who will have so much leeway to make up? Generalisations are notoriously unfair, but in cases

where the product is designed by development engineers and checked for performance by technical bodies, even though it be checked by a housewives' representative, it would seem desirable to redress the balance by at least consulting an outside designer. Such a compromise is suggested by the products themselves, none of which bears a well designed name-plate.

The frequency with which one is faced by an ill-designed dial, name-plate or scale in other products of fine quality points, I think, to a prevalent weakness in English design today, born from that very quality of sound craftsmanship which gives our products their lustre, but which can so easily become parochial in outlook.

Presentation

It is unfortunate that in the case of this firm the style of the name-plate is carried through on to the labels used on the cartons. The type-face used, which would be at home with its feet on a jazz carpet, has none of the classical qualities of fitness and comeliness which one can find in the No 500 scale. Used as a standard component of the labels, together with the now well-known three-line motif of those modern days, it does not do justice to the articles it describes. This field of design, which is largely graphic, is one which is easily passed over by those who are engineers by training and instinct. It is one in which a graphic consultant designer who has little technical knowledge of the methods of product manufacture can exercise a very beneficial influence, covering not only dials, name-plates and packages or labels, but also letter-headings, lorry sides and displays of all kinds to produce a house-style sympathetic to and supporting the firm's products. The graphic consultant runs in harness with the technically minded product designer, working with, rather than in spite of him, as a stylist might. This has of course for long been recognised in some design partnerships where engineers or architects form a team with graphic designers to produce schemes of a satisfying completeness.

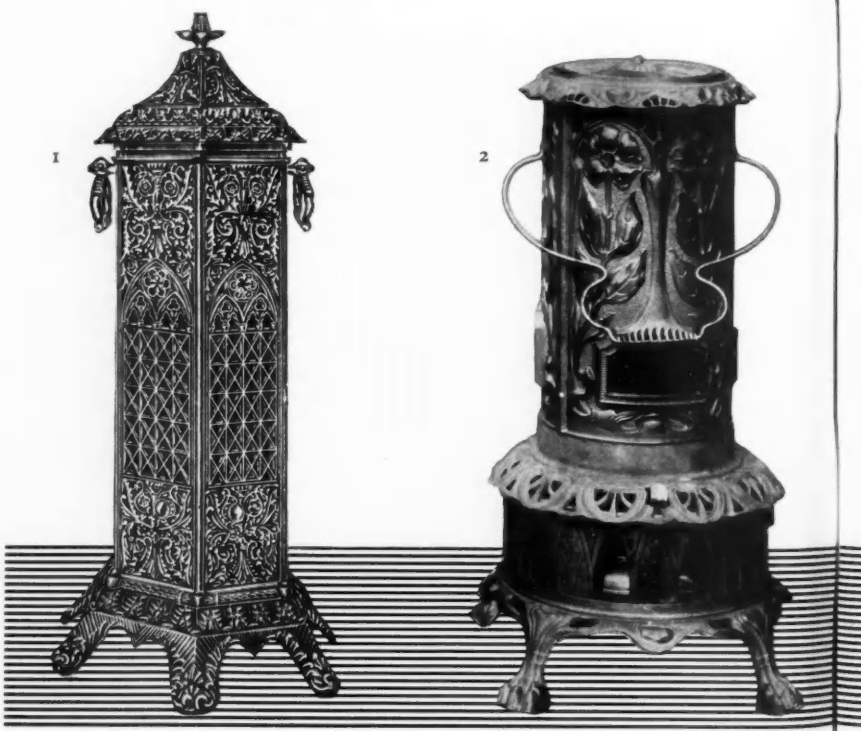
Progress in design

A stylistic progression familiar to most people is exhibited in the products of the foundry, from moral-some Victorian, through 'Art Nouveau' and the severities of the great clean-up of the late 'twenties, to

OIL HEATERS

1: 1889. *Of the early envelope-type oil stoves, this, the 'Cathedral', was the most popular, being on the market until* 1923. *With cast-iron case and six ruby windows, it had a rating of* 100 *candlepower, produced by round-wick burners in brass founts made in Germany.*

2: 1903. *The last of the cast-iron stoves and showing the influence of 'Art Nouveau'. These two are representative of some nine different models then current, all of which could be obtained "finished in art black (ie Japanned) or (stove) enamelled in assorted colours". An intermediate type was the 'Stella', which is not shown here. It had a cast-iron base and steel drum.*



the more gracious concept of design now current. The use of sheet metal, although it has by no means ousted cast-iron, has probably had as great an influence on appearance as the change in finishes. Vitreous enamelling produces a surface unsurpassed for durability and ease of cleaning. But, to its credit, the firm allows plastic to take its rightful place as the material for some contemporary products.

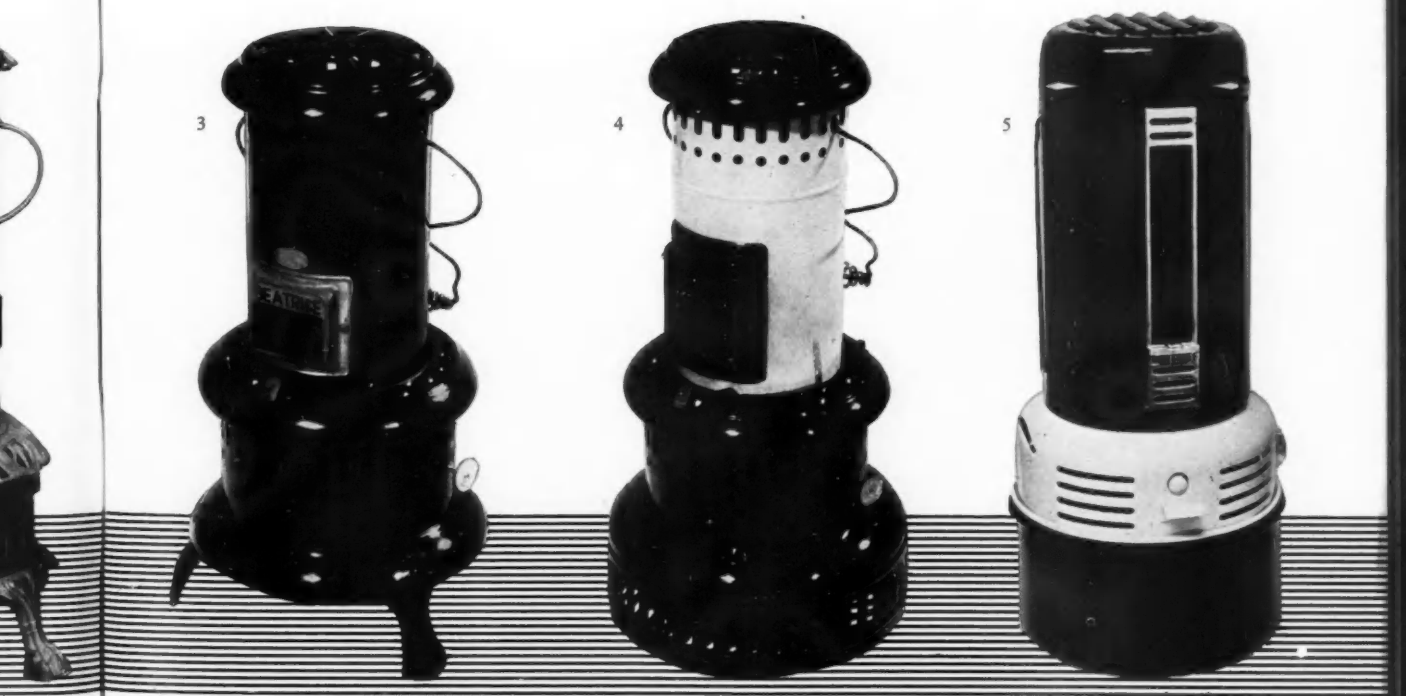
It has been found in practice that the wide range of colours which vitreous enamelling makes possible cannot be taken advantage of in this country. Cream or green still continue as favourites for the English housewife, although Canadians take to mincers in canary yellow, vivid blue and black with blue handles. This export range is in plain colours. Reasons of economy, however, dictate that the Georgian green most popular here shall be dappled.

The case histories dealing visually with various articles serve to show that they are not only a great deal more efficient than they were, but that the majority are comely as well. The old material of cast-iron, once so beautifully used by Robert Adam, has found a new aesthetic which no longer has to be underwritten with black lead and elbow-grease, and in which articles have been produced as pleasantly devoid of the stylist's mannerisms as they are unmistakably English.

3: 1932. *The 'Beatrice' No 1, is made entirely of steel. The tank is finished in vitreous enamel.*

4: 1945. *A skirt, making for greater stability, has replaced the legs and a larger window gives a greater feeling of warmth.*

5: 1947. *Based on a design submitted by Raymond Loewy, the No 4012 is the first radical departure from what was a basically similar pattern going back to 1903. Logically using the fuel container as the base, without feet or skirt, it has an elongated window consorting more happily with the case. The chromium window frame is, however, open to criticism. During the development stage the lower horizontal recesses were open and intended as ports through which a lighted taper could be inserted. This was found to be impracticable and the admirable intention was dropped, but the now functionless form has been retained as a decorative feature, the recesses being coloured red. It became, in fact, the modern equivalent of the Gothic fancy surrounding the 'Cathedral's' six ruby windows. The band of cream, by providing a strong accent above floor level, helps by 'floating' the design to avoid the squatness of previous models.*



BOILING STOVES

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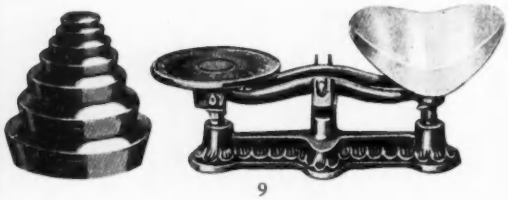
6: 1889. *The 'Beatrice' No 1 was provided with a single flat-wick burner. The heavy cast-iron base had the virtue of stability.*

7: 1890. *The single burner stove was joined almost immediately by a double-burner model. Although intended chiefly for use out of doors, it weighed over 13 lb. In 1896 it was provided with a cast-iron cap to act as a radiator. The model is still in production, though it is now finished in grey vitreous enamel. Variations on these models followed, some all steel and some partly steel. A blue flame model, with a circular wick, rated at 100 candle power, was introduced in 1901.*

8: 1950. *The 'Beatrice' No 4014 was developed by Harper's to complement the No 4012 heater, and unfortunately retains the same window feature. The wide flat tank of welded steel now holds an increased amount of fuel and the weight has been reduced to 4¼ lb. It is perhaps a pity that it varies from the No 4012 Heater in the placing of the cream finish.*

8

HOUSEHOLD SCALES



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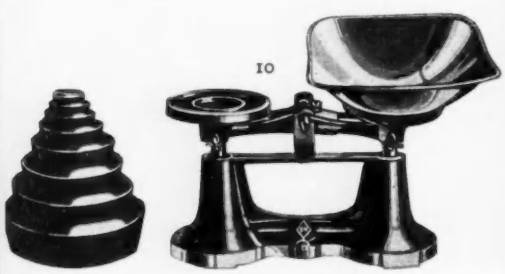
9: 1910. *The first two in the series are of the familiar pattern with separate weights, finished in black Japan with bright tin scoops.*

10: 1915. *The 'O.K' has been given a balance adjustment. The increased height, while adding to the size and storage space required, made for greater accuracy. Both models were of cast-iron, cumbersome to handle and, by today's standards, inconvenient to use.*

11: 1930. *The No 3107 still retains the weights and cast-iron base, but is lighter. Clean-looking white and a touch of red have replaced the all-pervading Victorian black. This is face-lifting rather than design proper.*

12: 1938. *On the No 3153 Raymond Loewy has performed the customary encasing operation and the result is that there are fewer bits to clean. The scoop, however, remains round and flat and he does not seem to have been allowed to consider the weights, which presumably go on getting lost. From now on pressed metal replaces cast-iron.*

13: 1950. *In the No 4019 Harper's turned to a different principle. The single-leaf spring gives a direct reading on a visual scale, replacing the awkward nest of weights with their usually semi-legible numbers. The pressed metal scoop has corners which facilitate pouring.*



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FOOD MINCERS

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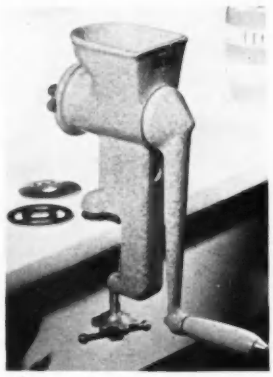
15: 1918. *Harper's had been making mincers for other manufacturers for many years before their own first model was marketed under the brand name of 'Beatrice'. It was of tinned cast iron and had a clamp suitable for fixing to wooden tables.*

16: 1948. *With vitreous enamelling, colour comes into the kitchen. A rubber pad makes it possible to clamp the No 4001 to the increasingly popular metal table tops. A curiously retrograde step has been taken in shortening the barrel.*

17: 1952. *Initiated in June 1950 and put on the market in February 1952, this latest version must be judged a thoroughly satisfactory design. The emphatic squareness of the previous model has given place to a lightly poised mass with graceful lines. The long barrel has come back, to overhang the receiving dish, and the clamp operating wheel is set at an angle. The latter is comfortable to handle and has become a part of the design instead of an unconsidered appendage as before.*



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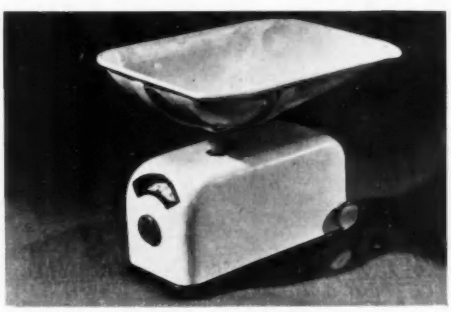
14: 1952. *Realising that the rather small scale and clumsy shape of the No 4019 could be improved, Harper's developed an intermediate prototype before this, the No 500. Before being submitted to the Good Housekeeping Institute in November 1952 it was subjected to an endurance test in Harper's laboratories. After varying and spasmodic loads had been applied by an electric motor to give the equivalent of 30 years of service, no measurable error could be detected in the scale. The plastic scoop, now a deep ovoid, has been seated further back to reveal the scale. It is all the more regrettable therefore that the latter should be so jagged in appearance. The staggered numerals and coarse division marks are quite out of keeping with the balance and suavity of form shown in the rest of the design. Rubber feet support both scoop and body and have eliminated the clatter associated with the use of older models.*

12 13



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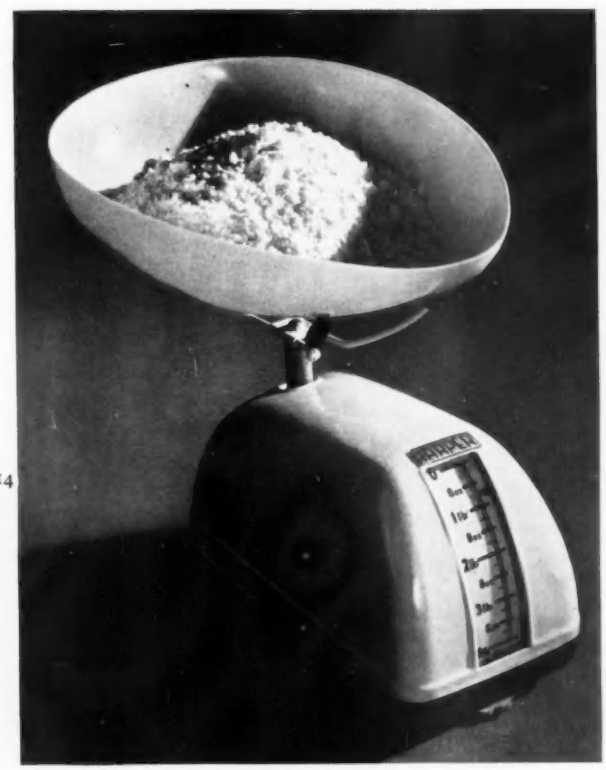

The trend in television cabinets

Peter E. M. Sharp

THE CURRENT DESIGN TREND in television cabinets is showing itself most clearly in the exterior surround or proscenium to the cathode ray tube. The rectangular tube, now widely adopted, with the more compact chassis, allows smaller cabinets to be used. As manufacturers tend to concentrate their efforts in this limited field, the extravagant design effects, often employed to give sets a distinctive character, are being replaced by more careful and subtle detailing of woodwork, knobs and fascia materials.

Basically sets have become rectangular wooden boxes (a few are in plastic), with fibre backs. At the recent Radio Show not less than 60 per cent of the cabinets had been 'contrived' rather than 'designed'. As they were essentially little different from last year's models, the attempt had been made to cheer them up with cross-banded veneers, beading and colourful woven fabric. A slight improvement was noticeable in that beech, natural walnut and sycamore appeared on the proscenium or inside it; though the top and sides of the cabinets remained hideously dark and shiny. For the remainder, the approach had been different. As this group of well designed cabinets included for the first time two of the largest firms in the industry, it is particularly worthwhile, in the following captions, to outline the new trend.

Although tempting, an analogy between television sets and the theatrical stage is hardly relevant, for the set during most of its life remains an item of furniture. Remembering this, many enlightened designers have in the past made out a case for hiding the gaping white eye altogether. Now, however, the almost universal dark screen (a functional device to increase contrast in the presence of incidental light), has alleviated the designer's task in dealing with tonal ranges. Doors, with purchase tax, are an expensive item and thus deprecated. Instead, a good deal of thought had been expended on the detail where the tube surround meets the cabinet or where the protective glass meets the proscenium. The raw plywood edge was no longer prevalent, with or without paint, and the simple morticed picture frame moulding was infinitely preferable to the curved bead covered with veneer running inwards towards the tube instead of around it.

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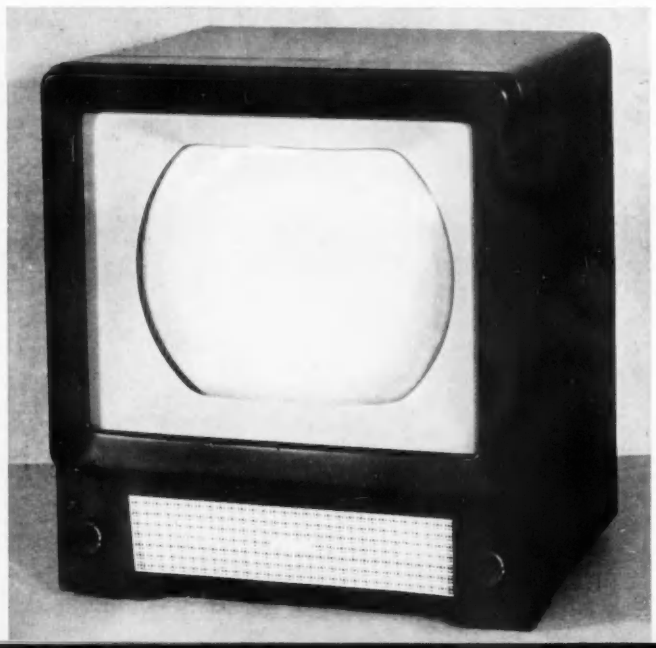

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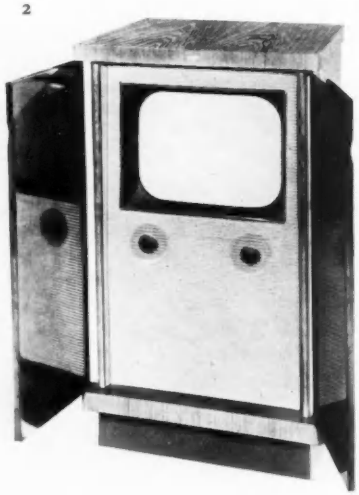

Design: Number 59

1: *Due to the heat from valves, hot air circulates dust around the set which settles on the tube. To deal with the problem the front of this receiver can be removed for cleaning without exposing the electrical parts. This escutcheon is made of polystyrene, and great care has to be exercised in the use of this plastic as it is inclined to rattle like sheet metal.* MODEL 932 A.C. COSSOR LTD.

2: *In this console receiver the fabric is effectively used in one piece and thus gets away from the usual break. The doors are pivoted top and bottom so that they can fold right back. The deep set plinth will not show the inevitable bumps from brooms. The front of the walnut doors is rather heavily figured, making the box look unnecessarily large.* MODEL BT5543 THE GENERAL ELECTRIC CO LTD.

3: *Designed down to a price this cabinet is almost as cheap as a table model. As one would expect from the Murphy designers (in this case David Ogle), the woods have been selected and used with great care and thought; oak escutcheon with abura framing and birch panels. Of particular note is the absence of awkward joins.* MODEL V210C MURPHY RADIO LTD.

4: *One of a family of three this table set is particularly pleasing in appearance. The tube mask is carried right up to the proscenium thereby eliminating one of the inevitable 'frames within frames'. The plastic fabric with the knobs protruding gives a clean finish to the front.* MODEL 996 FERGUSON RADIO CORPORATION LTD.

5: *There are a number of distracting features in the lower portion of this set: the polka dot plastic fabric, and the control cover of shiny acrylic plastic sprayed gilt. The break in the sides of the proscenium accentuates these shortcomings.* HMV MODEL 1824. THE GRAMOPHONE CO LTD.

6: *A particularly neat example of the 'picture frame' proscenium; the slightly bulging curves help to offset the curvature of the face of the tube.* MODEL VT62DA MARCONIPHONE CO LTD.

7: *A neat frontal appearance is achieved by taking the speaker fabric right up to the protective glass which also acts as the escutcheon between the wooden cabinet and the rubber mask. The sudden change of grain at the top corners and the rather awkward join make gluing of the veneer difficult. The controls are neatly inset at the side.* MODEL T207 E. K. COLE LTD.

8: *The beech surround contrasts effectively with the walnut case. The tube is slightly sloped forward as most tables are too high for comfortable viewing from an arm chair. The knobs are inset with labelled escutcheons – a feature remarkably absent from most sets.* MODEL KV 35 KOLSTER-BRANDES LTD.

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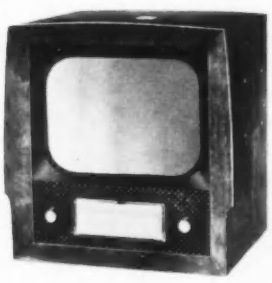

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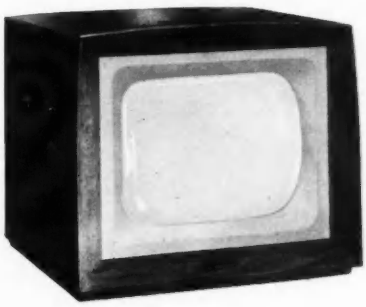

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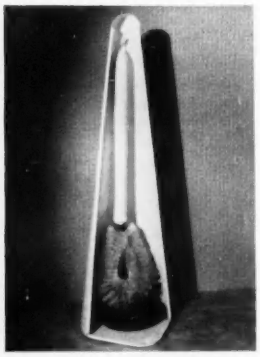
REVIEW OF CURRENT DESIGN

This feature offers a selection of goods up to the standard acceptable for 'Design Review', the photographic index of current British products that is open for inspection at the London headquarters of the CoID. Manufacturers in a wide range of durable consumer goods are invited to submit their new products for inclusion in 'Design Review'. Enquiries should be addressed to the Chief Industrial Officer, Council of Industrial Design.



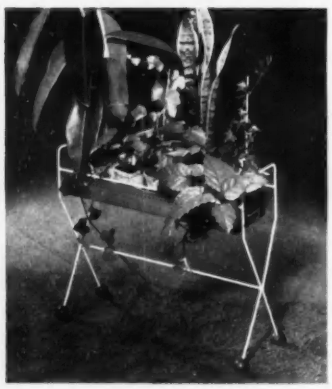
4, 5

4: *Polythene jars and bottles are specially designed to fit this travelling beauty case so that no straps are required to prevent them from rattling. The cream cowhide contrasts with the rich burgundy of the interior. The case is less than eight inches long.* Designer: T. Maylor. Maker: W. A. Maylor Ltd.

5: *Unsightly lavatory brush can be completely concealed in this simple holder which turns to fit into a corner. It is made of Japanned tinplate and is finished in glossy blue, green, ivory or white or with a crackle blue or green. The vitreous enamelled drip tray can be removed for scalding and disinfection. Adequate air circulation is ensured.* Maker: Taylor, Law & Co Ltd.

6: *Ball feet and bent metal rod are in danger of becoming a modern cliché if used without restraint, though this spidery structure looks at home with the group of exotic plants. The trough can be removed and is stove enamelled in scarlet, green, lemon yellow, lilac or black with matching feet. The framework is white.* Designer and maker: Peter Cuddon.

7: *Hand-thrown earthenware with grey, green or brown slip and sgraffito decoration. The lines of the trellis-like pattern describe the contours of the pots and emphasize their shapes.* Designer: William Barnes. Maker: Pilkington's Tiles Ltd.



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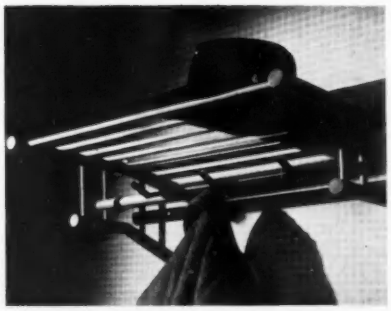
1: *Square shapes and chamfered decoration lend a traditional flavour to this essentially modern children's half-side bed which is made of close grained ramin wood. When the child outgrows the bed the sides can be removed and the head and foot ends can be attached to a full length frame to form a standard bed.* Designer: J. Christopher Heal. Maker: Heal & Son Ltd.

2: *Space can be saved with this bunk made of oak and oak-faced plywood. The half sides can be fitted on each side of the headboard if the bunk is placed so that it projects from the wall.* Designer: Ewart Myer. Maker: Horatio Myer & Co Ltd.

3: *Chosen by the* CoID *for the* 1953 *showhouse at Hatfield New Town this walnut dressing-table has ample storage space in its nine drawers. The slight inward curve of the drawer fronts adds a subtle elegance to the proportions.* Maker: Harvey-Artwood Ltd.



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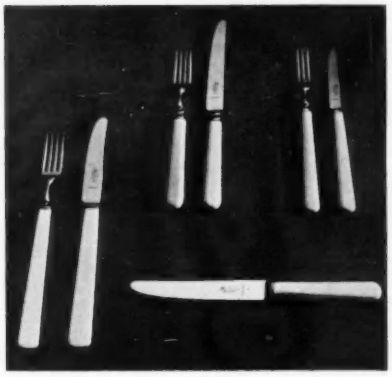

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8: *Coats hang clear of the wall from this hat and coat stand, preventing the dirty marks which result from some other wall fixtures. The simple structure of beech rods is wax finished and is inexpensive.* Designer and maker: R. Dudley Ryder.

9: *Knock-down furniture can be the answer to difficult transport problems, particularly on board ship where freight charges are estimated on cubic space. Plywood, with oak, mahogany or walnut veneers, is used for the top, the legs being of beech. Compare this table with similar German furniture illustrated on page* 32. Designer and maker: Dennis Beytagh.

10: *Good modern designs for cutlery are rare. These knives and forks were first produced in* 1948 *but are still in advance of the majority of designs on the market. The handles are of white grained* XYLONITE. *The Sheffield stainless steel blades are specially hardened to retain the cutting edges.* Maker: Needham, Veall & Tyzack Ltd.

11: *Clearing away dirty crockery presents little difficulty with this table, the top of which can be removed to form a tray. The frame is of mahogany and the sycamore tray is finished with a lacquer which resists spirits and heat.* Designers: Doreen Noble and T. R. L. Robertson. Maker: A. H. McIntosh & Co Ltd.

12

12: *The use of steel rod is becoming increasingly common in furniture today. Here the thin, stove enamelled legs and delicately poised arm rests contrast with the deep seat upholstered with vertical coil springs. The chair is available with various fabric covers.* Designer: Ernest Race. Maker: Ernest Race Ltd.

13

13: *Steel legs of a similar shape have a different character in this chair. The thin structure with the formed plywood back and seat combine to give a lightness of appearance. Fashionable ball feet have been avoided in favour of neat cylindrical rubber tips.* Designer: Robin Day. Maker: S. Hille & Co Ltd.

14

14: *In a style which is reminiscent of some Danish furniture this chair is the product of a new firm whose formation was announced recently* (DESIGN *April page* 35). *It has a steamed Yugoslavian beech frame and a formed plywood back veneered with mahogany or walnut.* Designers: John Morton and Tom Lupton. Maker: L M Furniture Ltd.

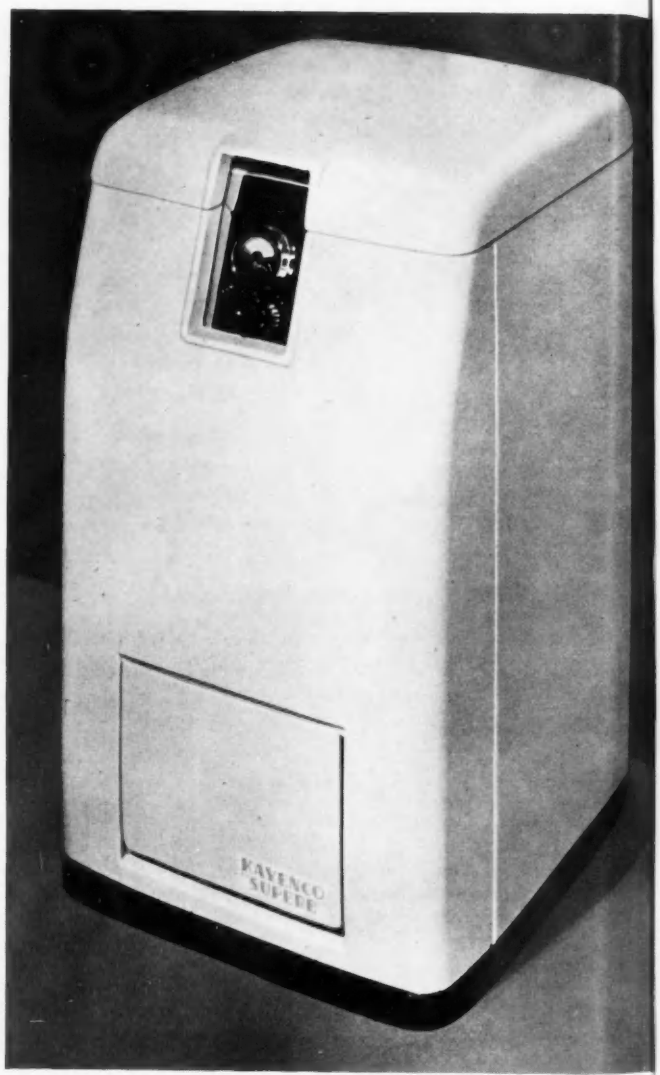
Design development of a GAS BOILER

Jack Stafford

BEFORE THE PRODUCTION of the 'Superb' boiler, Frederick Kay (Engineering) Ltd had never used an industrial designer. The firm, having assumed that the services of a designer would be too expensive, had just done its best to produce a 'clean looking job'. There are few people more suspicious than engineers employing designers for the first time, and the success of this boiler reflects great credit on both.

The firm started in 1948 as general engineers, specialising in heating and ventilating; Frederick Kay had spent his working life in this sort of trade, after an apprenticeship with The British Thomson Houston Co Ltd. In 1948 Kay's started to make a range of gas boilers, marketing its own product rather than remaining as a subcontractor.

Right from the start it was in competition with well-established firms, which had won good names for themselves with architects and heating engineers, and also with the public. The KAYENCO boilers differed in one main respect from others on the market at that time: they had a flue designed to prevent condensation in the chimney, which is extremely corrosive, from affecting the outside of the water heating shell. They were also designed to give maximum accessibility to the user. The firm has never been able to compete on price alone, but it has very successfully competed in terms of quality, ease of operation, and, with this latest model, appearance also.



ABOVE: *The complete boiler finished with a vitreous enamel surface for easy cleaning with a chromium-plated control panel. Top and front are cast, with curved contours to strengthen them against stresses set up in the vitreous enamel. The top is removable to give access to the flue-way.*

CASE HISTORY

1 and **2.** 1948: *The first* KAYENCO *boiler seen from the front and the rear. The casing was of sheet steel bolted to the frame.*

The first model, 1948, had the thermostatic control mounted at one side, and the thermometer with a vertical scale on the other. Access to the burners was from the front through a small door, whilst the governor, the cocks for the main and pilot jets, and the various safety valves were mounted open at the back. A plain sheet steel case was used, with bolted sides and front.

In 1950 a dial-type thermometer was used to be read from the front, and a bigger access door was fitted for the burners. The case was still of sheet steel, but had been modified to give sliding panels at the sides for easier servicing. The whole case was generally cleaned up in appearance.

In 1951, a safety code was introduced by the newly nationalised gas industry. To meet various provisions of this code, all controls were made available from the front, and a new model was rather hurriedly produced in which appearance had been largely and unnecessarily sacrificed for this purpose. In this model, **4**, Kay's pioneered the use of a new type of flame failure protection valve, for cutting off the main supply when the pilot jet was no longer alight. The old type incorporated a bimetallic strip, and the whole pilot jet had to be thoroughly warmed up by the lighting taper before any gas supply became available. In the new type a thermocouple actuated a magnetic valve; for lighting, a push button held the valve open to give an immediate supply.

By 1953, high purchase-tax and the steadily increasing cost of gas, coupled with the publicity for electric and solid-fuel appliances, had substantially lowered the demand for gas boilers. To face this situation, and the stiffened competition in the industry which had resulted, Kay's embarked on a complete redesign, **5** and **6**. Much pressure on component manufacturers had resulted in new types of thermostat and governor being available. With these new components it became possible to provide one single, easily cleaned surface, enclosing the whole boiler, which would have all controls accessible from the front. The new thermostat had a flexible stem so that it could be mounted on the front panel with this stem coiled vertically, instead of the old type with a rigid stem which had to be mounted at the side so that its length could protrude into the boiler. The new governor was spring-loaded and was much more compact than the older weight-loaded type. After the main engineering development had been done on this model, the firm asked the Council of Industrial Design to help it to find suitable designers to house this new boiler in a case which would have immediate appeal to the public. Among the designers whom the Council suggested were Ronald Homes and E. Cooke-Yarborough, and they were responsible for the present design opposite.

The best and final example of the firm's policy of providing a product

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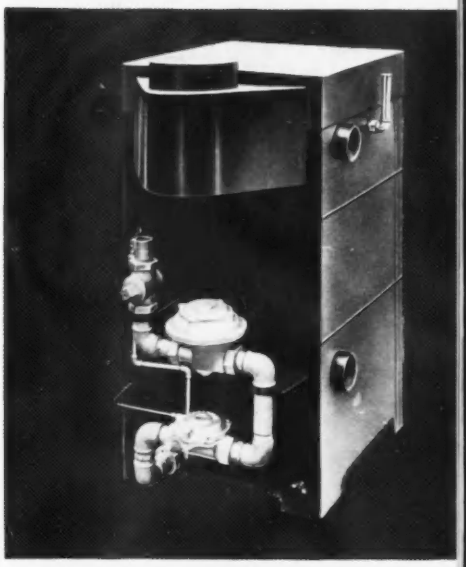

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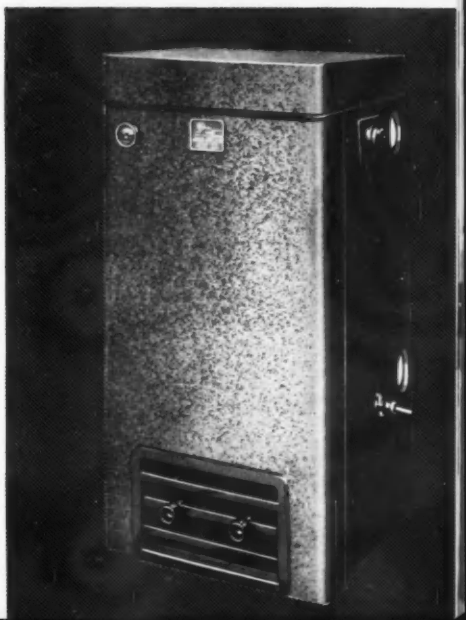

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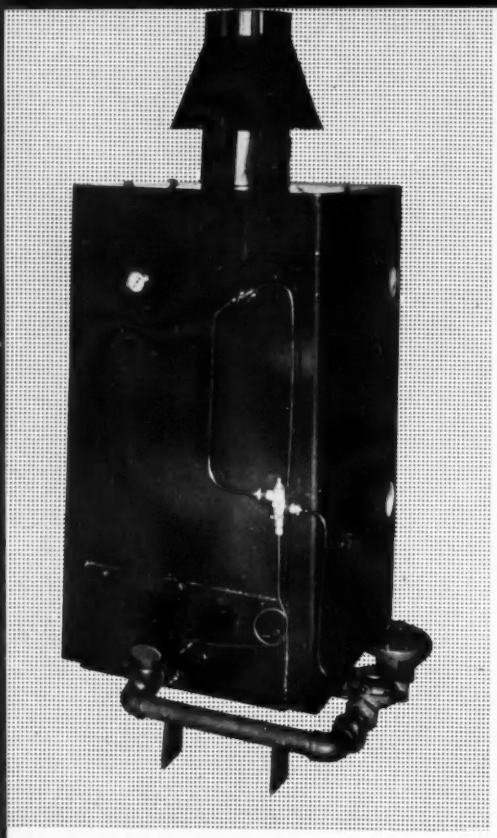
3. 1950: *An improved version still using sheet steel, but with sliding panels at the sides for servicing.*



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which is easily operated is shown on the access door for lighting the burners. When this door is opened, there can be seen on its upper surface the full lighting instructions for the boiler, printed in red. It is a gesture like this, a basic desire to satisfy the user, that sets KAYENCO ahead of competitors who have been in business so long that they still hang their instructions 'in the boiler house'.

4. 1951: *To meet safety regulations all controls were made accessible from the front. The model had to be produced hurriedly and its appearance was not fully considered.*

5. 1953: *The basic components for this later model are the water heating shell and burners and these are shown here in two sizes, for domestic and industrial use. The complete shell is built up from sections, each being of welded steel plate, having fins welded to it. The framework of the shell is carried down to rest directly on the floor. Burners slide in under each set of fins and are fed through the cut-off valve and the governor from the main gas inlet at the rear. Both sets of burners have been half withdrawn in the illustration, which also shows the provision in the front of the shell for thermometer and thermostat.*

6: *A plinth fits round the base of the boiler shell, supporting the burners and providing fixing slots for the sides. When the front is removed, as in this illustration, all the working parts are accessible. Union connections enable burners and controls to be removed without further dismantling of the boiler. It can also be seen that the boiler shell itself is insulated; this is a new principle and makes for easier dismantling and a cooler case when the boiler is operating, than the old method of insulating the casing. The front, which carries the access door to the burners, fits inside the plinth at the bottom and is secured at the top by two pegs which pass through flanges on the side panels.*

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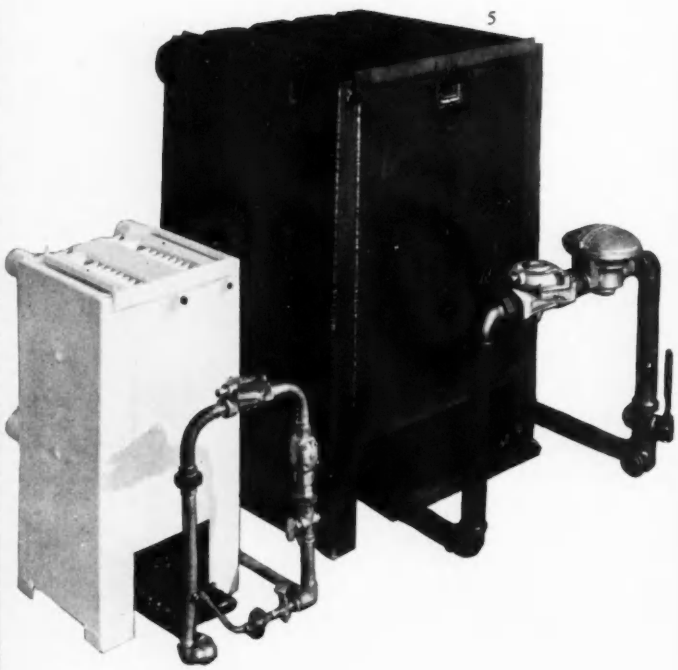

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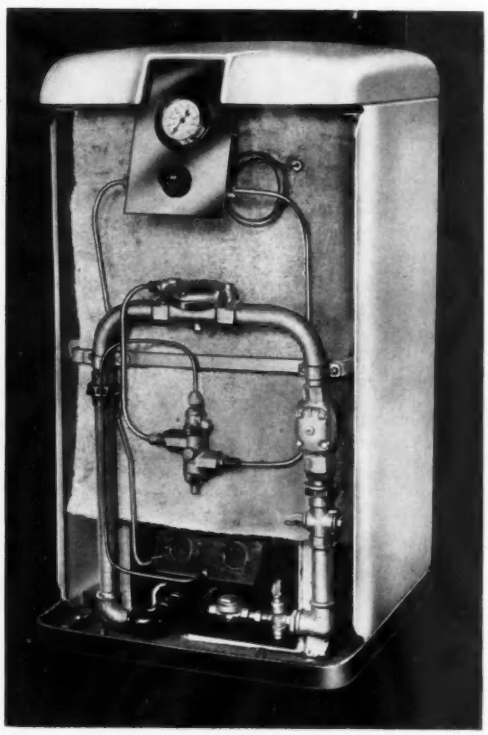
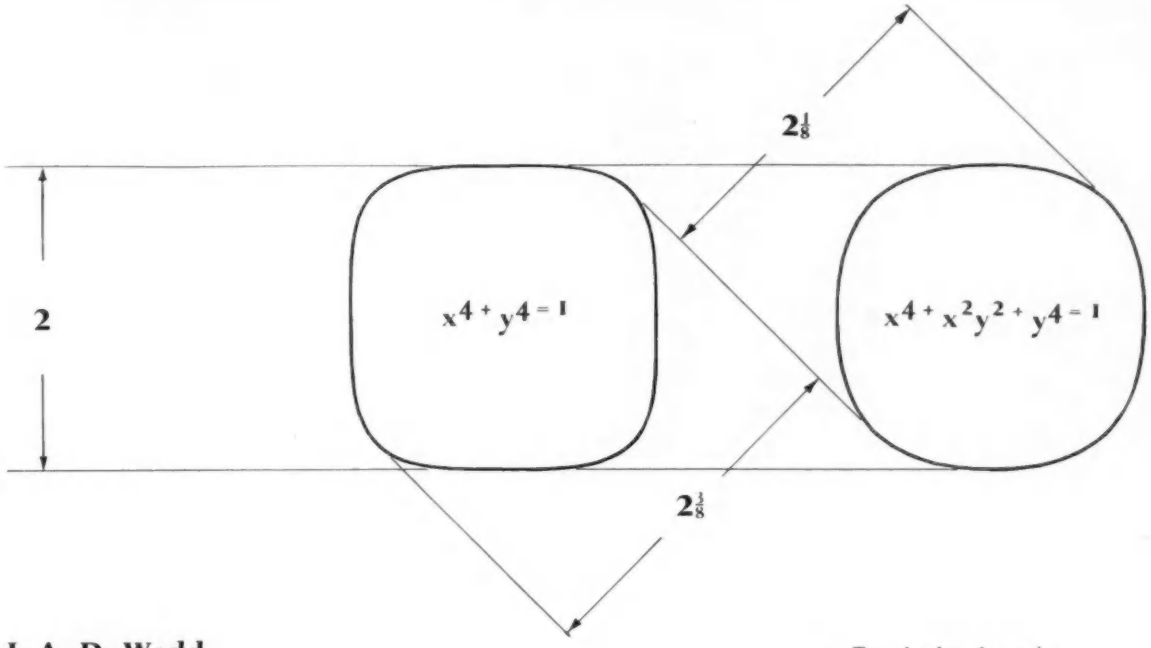


TWO FAMILIAR QUARTICS



1: *Two sketches of quartics, showing shape and dimensions.*

J. A. D. Wedd

In a former article (DESIGN *January pages* 15-17) *Mr Wedd discussed the evolution of quartics and pointed to their popular appeal today. Now he deals particularly with two quartic shapes and suggests that the precise methods with which they can be described could be exploited in the engineering industries.*

IN ANY DISCUSSION OF FORM, we cannot neglect geometry. Yet if this is restricted to straight lines and circular arcs, an injustice will be done to the curvilinear outline. Turning to Cartesian geometry we find a better tool for handling these outlines with a new precision and terminology, to be used by engineers. The first step is to understand the scope of the quartics.

The reader will recognise these two forms. They are a compromise between a circle and a square and are deservedly popular. An obvious application of them is in tableware which could chip if square and roll if round. What may be less well known is that they belong to that category in Cartesian geometry which includes the boomerang and the kidney and the aerofoil and the figure-of-eight: the quartics. Further, they are the two simplest possible types.

A second point to be noticed is that they have been drawn with elliptical compasses. This is a comparative novelty, for with such an instrument lines with varying curvature can be drawn accurately. In contrast to the execrable ellipses drawn with four circular arcs, these quartics are drawn with four elliptical arcs; a new level of thought; a new geometry.

The critical distinction between the old and the new geometry is the use of equations which enables us to express new and interesting relationships between curved forms. For instance, the shape of a television screen is derived from the first of these two

2: *Entasis on a television screen. Earlier masks had straight edges, but the quartic form is unmistakably more satisfying.* Philips Electrical Ltd.

5: *Steuben Glass Ovenware. The first of the quartics has an area 15 per cent greater than that of a circle of equal width. Recognising that moulded glass has no need to be circular, the design team of Steuben Glass has adopted a quartic form and so makes fuller use of oven space.*

forms by introducing a numerical factor: the equation would be something like $x^4 + 5y^4 = 1$. Similarly we could compress the second form to give us a cartouche as in the badge of the Council of Industrial Design, or in that of the Society of Industrial Artists. This form, while enjoying great popularity today has more sophistication than the ellipse and has been in use for thousands of years. It was well known in Ancient Greece. It is interesting to ask why, in the intervening Christian era, emphasis went almost exclusively back to the circle. Even the ellipse succumbed, yet pagan amphitheatres repeatedly adopted an elliptical plan. Was it plain ignorance of the geometry, or was it felt that the Church preferred circles?

The introduction of algebra is a great step ahead. First of all, it enables us to classify our curvilinear outlines. Take the 'Milner Gray oval', as it is sometimes called. We can classify it usefully in a hierarchy somewhat as follows:

Class	Cartesian
Order	Quartic (fourth order of curves)
Family	Simple, symmetrical loops
Genus	Cartouche ($x^4 + a^2 x^2 y^2 + a^4 y^4 = 1$)
Species	4 : 5 proportions (ie $a = \frac{4}{5}$)

We may also obtain the dimensions at any point on its outline as precisely as we may require. It is only necessary to solve a quadratic equation (in x^2) which is soon done with a slide rule or tables. Of course there is no need for such precision in a trademark: it is the precise thinking that acknowledges this possibility that is important. What is important is that there are branches of engineering where it is necessary to solve quartic equations precisely, for instance in the design of automatic controls. Design is bound to reflect such developments, and precision is never a step backwards.

The quartic in industry

In the development of the electrolytic tank we have a pointer to the sort of instrument that might be adapted to draw out a more complex quartic curve. Such a device consists of a tank of liquid whose electrical field can be varied, and through which a travelling probe is guided. Also there is an electronic apparatus for amplifying the signal from the probe and passing it to a wheeled carriage supporting the

3: *An Etruscan gem, date about first century. When a curvilinear outline meets a rectangular subject, the result is a quartic. The television screen is one instance, and this Etruscan gem of* 18 *centuries earlier is another.*

4: *Two badges: The Council of Industrial Design and the Society of Industrial Artists.* Designer: Milner Gray.

pen which traces out a curve. At the moment nobody wants to draw quartics with it nor can it be adapted to a Cartesian equation. But one can imagine the possibility of putting the equation into a computer coupled to the electronic apparatus. Alternatively we can go on to differential equations and set up a suitable field in the electrolytic tank. Either way, it is foreseeable that the carriage could be replaced by a milling machine for making precise outlines, which would be taken from a mathematical formula and not, as at present, from a master pattern. By this method it would be possible, perhaps, to increase the precision and speed the production of turbine blades. At high speeds there is the problem of electron paths, whose curves must be followed by electronic apparatus with considerable accuracy, so the discovery of the exact nature of the curve becomes important.

A shape resembling one of these two quartics is sometimes reached by a potter who distorts his original circular form regardless of any geometry. In such cases it is possible that the inspiration came from the Steuben glass ovenware, and in making the mould precision of this algebraic sort is not so far out of place. In fact, as mass-production throws greater emphasis upon the original design from which the mould is made, Euclidian curves will give way to those found in Cartesian geometry. I do not claim that the Steuben Glass team arrived at this shape conscious of its geometrical significance; and the time when a machine will be set to an algebraic equation is not here yet; not quite. But I would claim that, intuitively, the next step in the algebraic series has been determined in precisely the same way as the Greeks determined the parabola, the ellipse and the hyperbola. They gave these shapes their names and discussed their geometry centuries before anyone discovered ways of drawing them with instruments.

Was their work an intellectual caprice? It may have seemed so then, but we today have learned to use such curves. The parabolic arch, for example, would have changed architectural history if it had found favour 2,000 years ago. The ellipse is also something more than a draughtsman's accomplishment, for the engineer has need of it too, as is shown by the production of a lathe recently for turning ellipses. We cannot afford to ignore the quartics. They are the emergents of our times, part of our future.

A display for marine engines

THE PROBLEM OF DISPLAYING A WIDE VARIETY of marine engines from the smallest auxiliary to the very large units used to propel ocean going liners was solved in an impressive manner in this stand at the recent Marine and Engineering Exhibition at Olympia. The stand was designed by F. M. Gross for The Brush Group and the Associated British Engineering Co Ltd.

It was intended that the main pavilion should represent a ship, but this was achieved more by suggestion than by direct imitation. It consisted of a box-like shell supported on steel tubes, which allowed some of the engines to be displayed underneath. One of the two staircases leading up to the main floor level was a circular cantilevered structure carried on a central steel mast, forming an interesting tower feature. The curved façade with the four portholes and the projecting rail above symbolised the bridge of a ship and provided the necessary nautical flavour. But there was also a vertical structure which simulated the lantern of a lightship and the semi-abstract façade mural depicting the hoisting of an engine on to a liner. Greatly enlarged photographs illustrating the various applications of marine engines were used with great skill but the imaginative lighting scheme which was to have been an important feature of the stand could not be operated owing to the strike of electrical workers.

Richness was added to the simple, freely planned interior by the use of combinations of unusual woods such as aromatic cedar, chumprak and okoumé. From many parts of the reception areas, the large cocktail bar and private offices of the two companies, the rows of engines on display below could be glimpsed through the finned and pierced screens. General Contractor: Beck & Pollitzer Ltd.

1

1: *The main façade of the pavilion. The portholes in the curved front and the mahogany and wire deck rail above suggested the bridge of a large ship. Behind the screen of vertical fins, of alternate sycamore and abura, was the chairman's office. The light from within cast interesting shadows from the potted plants which lined the screen inside. The semi-abstract mural to the left depicted the hoisting of an engine on to a liner.*

4: *Part of the reception area. Some sections of the open framework of the walls were filled in with panels carrying enlarged photographs showing the uses of marine engines. The white rings on the upper ceiling framework show where lights would have been fixed but for the electricians' strike. A lower ceiling which partially covers the reception area and bar was designed to dim these lights, and was pierced in places to give the effect of glittering stars. The flooring consisted of panels of okoumé and birch.*

2: *Interior of the chairman's office. The finned screen in the background gave a quality of lightness; the severe vertical lines being broken by the delicate tracery of the plants. Covering the wall on the left was a 'blown up' photograph of foaming sea which provided a texture reminiscent of marble.* RACE *chairs were used.*

3: *The electricians' strike also affected this fascia panel with ground glass lettering which was designed to be lit from behind. At the last minute the letters were painted white. The decorative panels illustrated the history of ship propulsion from the early Egyptian rowing boat to the modern liner.*

2

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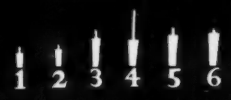
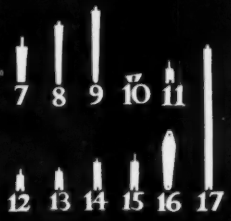
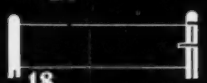
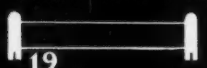
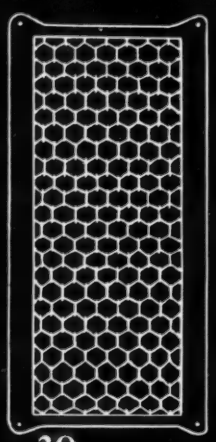
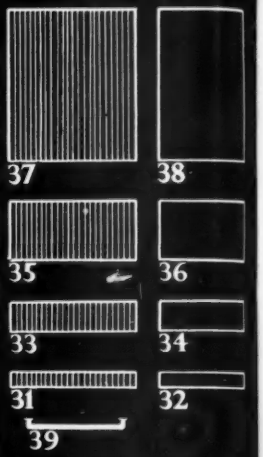


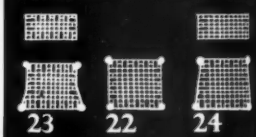


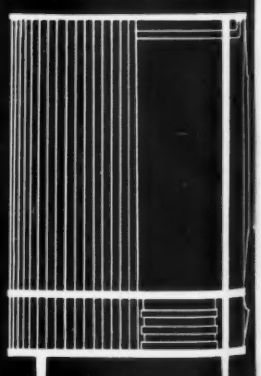


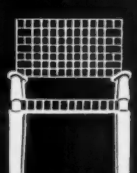












From Germany

New package and unit furniture

AMONG THE MANY WEST GERMAN FACTORIES that are today making modern practical furniture for small post-war homes, the firm Domus-Raumkunst of Schwaikheim, near Stuttgart, seems to have a consistently experimental policy. The head of the firm, H. Schoeck, has himself designed a new range of unit furniture for the more expensive market which, though simple in line and construction, gives an appearance of wealth

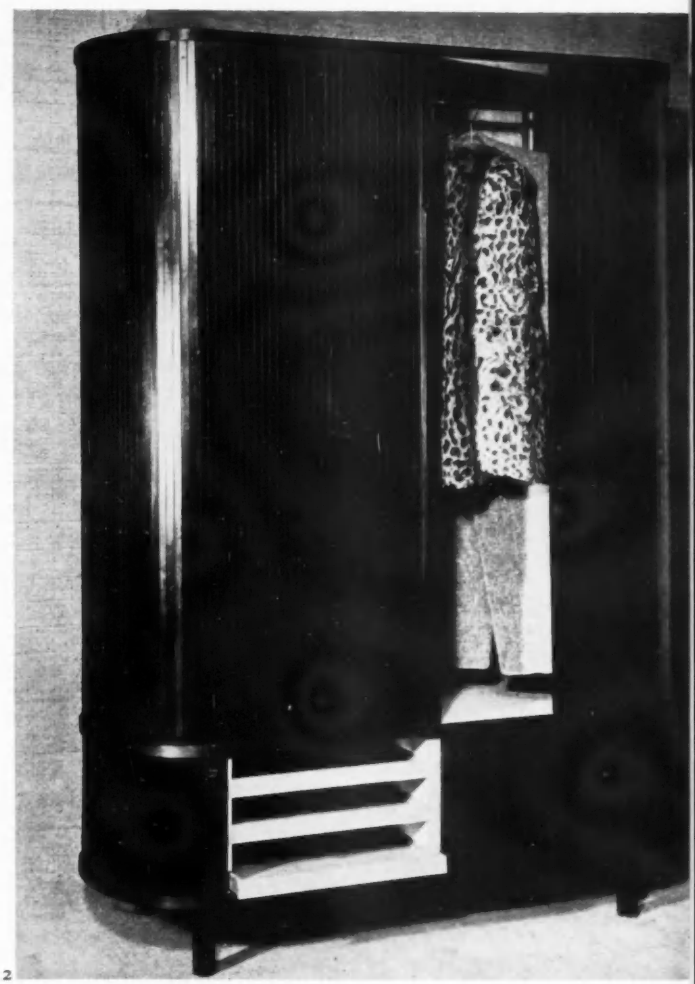
Components from 22 to 28 shown half scale

from the selection and detailing of the contrasting timbers. This range is obviously designed to appeal to the American market, whether for sale overseas or to Americans in the United States Zone, for all prices are quoted in dollars as well as marks.

Also probably for overseas shipment, Domus-Raumkunst has taken up ingenious designs first produced in the studios and workshops of the Berlin Hochschule für Bildende Künste. Professor Eduard Ludwig, the head of the furniture and industrial design department of the school, devised with his students a new range of inexpensive demountable package furniture, for home and school use, which can be easily and securely assembled by the customer. To English eyes the style may appear rather severe and forthright, but the simplicity and solidity were no doubt dictated by the needs of the various assemblies – the table and stool legs, for instance, have to be thick enough to house a substantial, threaded steel lug to screw into the canted collars on the underside of the flat tops. The tambour fronts to the wardrobe and the writing desk also dictate a more generous corner radius than is customary in most post-war furniture. Both ranges of Domus-Raumkunst are illustrated on this and the two following pages.

DEMOUNTABLE FURNITURE FOR DOMUS-RAUMKUNST

Designer *Professor Eduard Ludwig*



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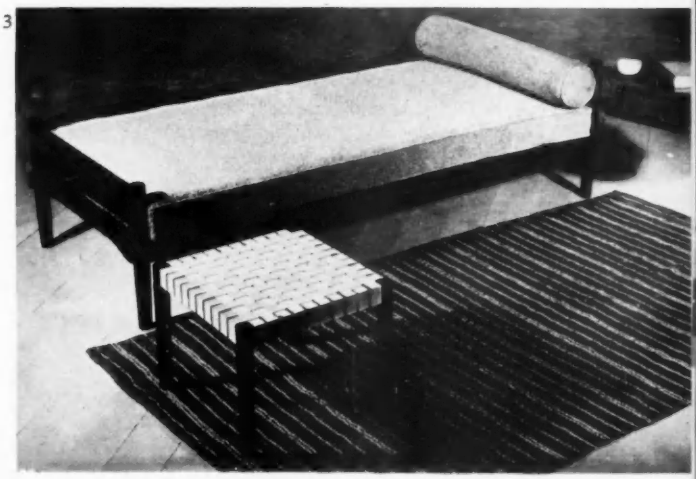

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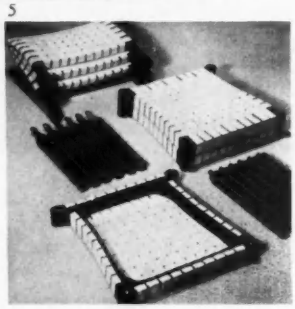
1: *The diagram shows how the units are made up of 38 basic components some of which are interchangeable. Each one of these components is numbered and it can be seen in the elevations how these numbers relate to the assembled units. The complete range includes a dining table and some school furniture which are not illustrated here.*

2: *The tambour front to this wardrobe gives a wide opening, though it may have a tendency to stick. The drawers which are little more than sliding shelves are an unusual feature.*

3: *Divan and stool. A swivel-hinged cupboard with a tambour front is fitted to the head of the divan.*

4: *Stacking chair with webbing upholstery. The legs and back are detachable and the method of construction is similar to that*

4



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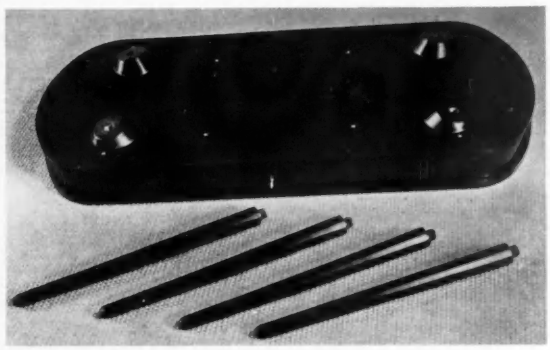

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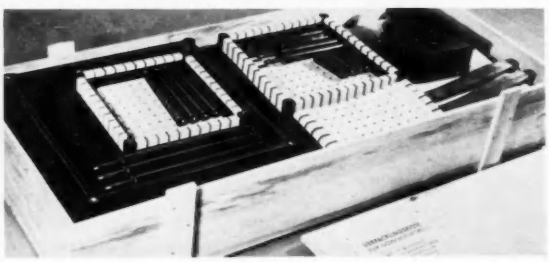

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Demountable Furniture for Domus-Raumkunst

continued

of the writing table. Strong joints at the corners are essential. The chairs stack closely, the seat of one chair resting directly on the one below.

5: *The three chairs which have been broken down into separate components ready for packing and transport.*

6: *Writing table with black polished plywood top and beech legs. Three shallow drawers for writing materials are enclosed within a tambour front. The legs are detachable.*

7: *The underside of the writing table showing the method of fixing the legs which dispenses with the usual frame construction. The blocks are cemented in position and are furnished with a steel thread to fit the screw-on legs.*

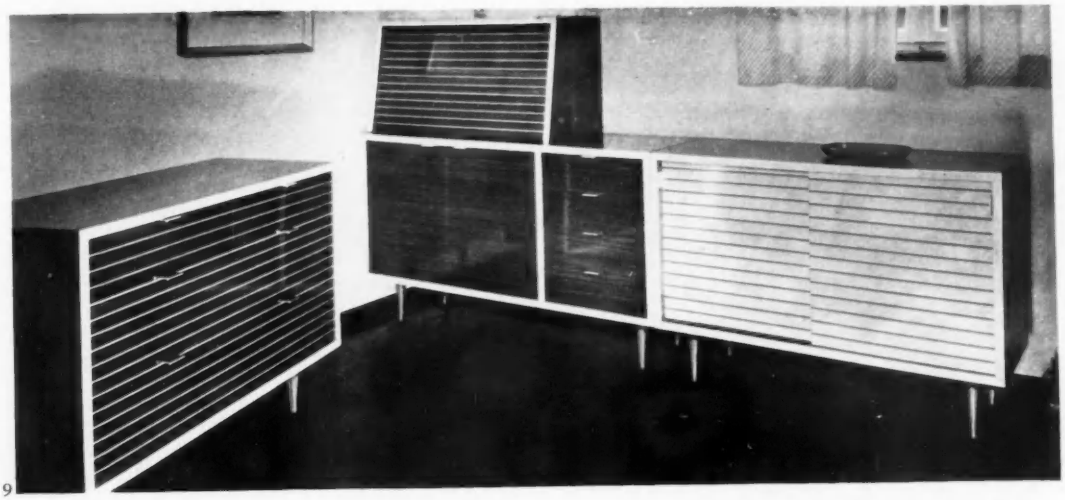
8: *It is claimed that the average saving in storage and transport space is 80 per cent. This can hardly be an exaggeration for the packing case contains the divan complete with mattress, roll bolster and bedside cupboard, a straight chair, an arm chair, a table and a bookcase.*

RANGE OF UNIT FURNITURE FOR DOMUS-RAUMKUNST

Designer *H. Schoeck*

9: *Group of storage cabinets. The carcases are of walnut with edges and stripes of maple. The sideboard on the right reverses the use of the dark and light woods giving a counterchange effect. The brass handles are neat and unobtrusive and the legs are detachable. The use of pattern to emphasise structure gives these units a strongly architectural character.*

10: *Black polished beech is used in the framework of this chair although similar versions are also produced with natural finishes and in other woods. The resilient, extruded plastic tubing which is used for the seat and back is washable and can be supplied in white, grey, yellow, blue, red, green or black.*



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11: *Included in the unit range is this desk which has a top drawer and below a cupboard with one shelf.*

12: *Emphasis is again given to the edges in this table by the use of light maple veneers. There is a shelf for books and papers. The seat and back of the chair are covered with an imitation leather plastic material obtainable in a wide variety of colours.*

13: *The straightforward shapes of this dining room furniture rely on contrasting timbers for richness. This effect is emphasised by the brightly coloured plastic chair upholstery.*

NEWS

Crafts for all

The fact that thousands of people visited the recent International Handicraft Exhibition in a single week provokes many questions. Why did they come? Most of them presumably because they are themselves interested in making things. Many of them because – living as industrial workers in a machine age – they have an unsatisfied creative urge. What did they think of the exhibition as a whole? The stands themselves – good exhibition practice in a decent family pattern, with most of the current clichés of rush matting, wickerwork and trailing plants. Did the public see any divergence between this standard and that of the exhibits themselves? If there was a uniformly pleasant mediocrity in the display there was an almost equal uniformity among the commercial exhibits – the majority of the products shown were imitative, unsuited to their purpose and 'fake' in one way or another. Imitation 'Toby' jugs, imitation lead soldiers, imitation carving – the list could be continued *ad nauseam*. All the old familiars were there – flying ducks, leering heads, crinoline ladies. There were 'design kits' for marquetry galleons, transfers for pen-painting and pokerwork, posy rings and logs for barbola decoration, ruche fringe and synthetic thonging for plastic lampshades, and Jacobean twist and Queen Anne legs for dinner wagons and television cabinets.

And finally, what did these visitors gain from the exhibition? Much of the value of craft work (particularly in schools) lies in the self-discipline it imposes and the personal standards of workmanship which are attained. This exhibition, with its 'oil painting by numbers' (a picture you want to frame at your first attempt), its promise that "this is the stuff that sells", and its reassurance that no hard work or drudgery need be involved, was truly appalling.

Scottish education conference

The Scottish Committee of the CoID has organised an education conference for those holding responsible posts at centres of art education in Scotland. The conference will be held for one day in the Moray House Teachers' Training College, Edinburgh, on Saturday, November 14. Speakers will include Robert H. Matthew, Professor of Architecture, University of Edinburgh; Misha Black of Design Research Unit; and Gordon Russell, Director, CoID. Those wishing to attend should contact the Education and Training Officer, the Scottish Committee, CoID, 95 Bothwell Street, Glasgow C2.

Paying the designer

It is always hard to lay down, and, still more, to apply, appropriate scales of remuneration for professional workers. For the designer, whose work is so closely related to success or failure in the market, the problem of what is a fair reward is even harder to determine. But whether or not scales of fees can effectively be laid down in this field, it is at least valuable to begin with the facts, and the Netherlands Instituut Industriële Vormgeving is to be congratulated on the survey which they have recently undertaken to ascertain the fees and the methods of assessing them among consultant designers in Holland.

About 130 designers responded to the Instituut's inquiry, and a list of fees, showing the highest estimate and average fee for each of 47 products, mainly in the domestic field, has now been published. The Instituut emphasises that this statement is not to be taken as a fee index, but as a comparative statement based on facts derived from practising designers. As might be expected, a wide disparity is disclosed between the lowest and highest estimate for each article. The lowest estimate is put at about £5; the highest at £500. Generally, the amount charged increases, as would be expected, with the complexity, from the point of view of production, of the article concerned. Fees of £10–£15 seem common for products such as a handbag, door knob, dinner fork, comb, tea cup, and wallpaper. In a somewhat higher category (around £50) fall such articles as a gas ring, lawn mower, stove, electric fire, perambulator and wireless set; whilst for the most complex products, particularly machinery, fees ranging up to £400 and £500 (with average fees of £100 to £150) are charged for such articles as a sewing machine, typewriter, and washing machine. The larger fees seem likely to be exceptional, however, and the majority appear to range between £10 and £50.

Though the scope of this inquiry is necessarily limited, it should provide a useful basis for comparison with British designers. It would be interesting to have a similar up-to-date survey of practice in Britain to compare both with the Instituut's survey and also with the conditions of contract and schedules of average fees already published by the Society of Industrial Artists in this country.

TV and radio setting

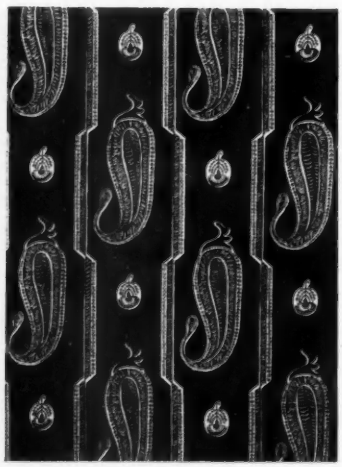
Television and radio receivers in modern room settings were featured in the EKCO *stand at the recent Radio Show, Earls Court. The furnishings in this setting, supplied by Liberty Contracts, included a sideboard by S. Hille & Co Ltd and a lamp designed and made by Bernard Schottlander. All the* EKCO *offices and demonstration rooms at the Show were designed by Gordon Bowyer. The television cabinet was designed by J. K. White and the radio cabinet by John Grant, both of the firm's design studios.*

Design appointment

J. Lunn, who until recently was in charge of the Furniture and Display Section of the L C C Architects Department, has been appointed to a new post of co-ordinating designer for British European Airways. Mr Lunn's duties will involve the co-ordination of the design of all B E A property which is seen and used by members of the public, including such items as booking offices, lounges, vehicles, airport equipment etc.

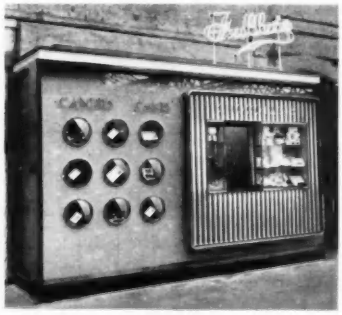
Textile Firm's Golden Jubilee

These illustrations show early and recent examples of fabric designs produced by the firm of W. Foxton Ltd which this year is celebrating its Golden Jubilee. The firm ranks as one of the pioneers of the modern movement and has had an important effect on the development of modern furnishing fabric design. William Foxton, the founder of the firm who died in 1945, *was associated with Sir Ambrose Heal and the late Frank Pick in the foundation of the Design and Industries Association. After the first World War, many of the designs were well in advance of the rest of the trade and the hand block printed linen produced in* 1921, *left, is an excellent example of that period. The example, right, a more recent design printed on spun rayon, was included in the furnishing fabric section of the Festival of Britain.*



Kiosk redesigned

These illustrations show the old Fuller's kiosk, above, in the Southern Region Station at Charing Cross, which has recently been replaced by a new one, below. It can be seen that storage space in the old kiosk was limited by the fact that the display windows took up most of the available wall space. Also the ornate mouldings collected dirt and were difficult to clean. The new kiosk was designed to give maximum display value combined with the greatest possible storage space, and to reduce cleaning to a minimum. The display



windows are purposely small, the porthole windows being intended to pin-point individual items, and at the same time allow cupboard space within the kiosk. Construction is of mahogany throughout with silver bronze trimmings. The front is covered with plate glass panels which have been printed blue by the silk screen process. Internal panelling is of cream, plastic faced hardboard with mahogany trimmings, and amenities for the attendant include a convection heater, coat cupboard with a full length mirror and electric points for a fan and heater. Designer: Industrial Design Development. General Contractor: James Walker (A.D.) Ltd.

Finnish art and design

Examples of furniture, pottery and textiles are included in an exhibition of contemporary art in Finland which is on show at the Glasgow Art Gallery, Kelvingrove, until November 28. The exhibition, which was arranged in co-operation with the Fine Arts Academy of Finland and the Finnish Arts and Crafts Association, was designed by Tapio Wirkkala. It will later be moved to London and will open at the New Burlington Galleries on December 12 – January 23.

Mark Hartland Thomas

Mark Hartland Thomas has resigned from the CoID as from October 31 in order to devote himself to the work of the Modular Society, for whose formation he has largely been responsible, and to re-enter architectural practice.

Whilst working as an architect in Bristol before the war he took a keen interest in the local group of the Design and Industries Association, of which he became secretary. He had, therefore, a sound knowledge of industrial design problems when he joined the CoID in 1947 as Chief Industrial Officer. He was faced almost at once with the organising of his division to cope with the approach to industry on the Festival of Britain 1951. The stimulation of interest in the project and finally the selection and installation of nearly 10,000 exhibits without serious criticism or breakdown owed much to his personal efforts, which, with his architectural training, were also of special value on the 1951 Design Panel. He was responsible for suggesting the building up of the 1951 Stock List and explaining it to manufacturers. As 'Design Review', it has become one of the Council's most important tools. For this work he was awarded the OBE in 1951. In 1952 he went to the USA as co-leader of the Design for Production team.

He carries the good wishes of all his colleagues with him in taking up work for

which he has special aptitude and training and which will continue to give him many links with the work of the CoID.

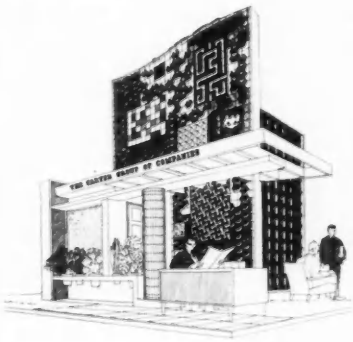
Design research for yachts

Research into the design of hulls and sails for racing yachts will be one of the main activities of a new council which has been formed under the chairmanship of Lord Brabazon of Tara. Particular attention will be paid to the design of a 5.5 metre yacht which will be one of the classes in the 1956 Olympic games. A competition for the design of a 5.5 metre yacht will probably be held early next year.

Decorative Building Materials

The decorative possibilities of different combinations of building materials will be the theme of this stand for the Carter Group of Companies at the Building Trades Exhibition to be held at Olympia from November 18 – December 2.

Tiles will be prominent in the display and will include a new series of small scale designs for domestic use. An example of the interior and exterior tiling used by Denbighshire Technical College will be shown and there will be a small section devoted to ceramic grilles. The stand has been designed by A. B. Read, Director of Design for the Carter Group of Companies with Christopher Read as consulting architect. The drawing is by Gordon Cullen.



BOOKS

Design for Production, *Report of the British Productivity Council, October* 1953, 3*s* 6*d*.

For a quarter of a century engineers and designers have made the pilgrimage to the USA to find out 'how they do it'. Now, in a report published by the British Productivity Council, a strong team of specialists has recorded its observations of American design and production practice in the engineering industry.

The report disclaims any attempt to assess all the merits and de-merits of American methods or to present a series of startling novelties, but aims to bring out those practices which appeared to contribute to productivity. It emphasises (although the team visited twenty-seven factories, seven research and ten other establishments in six weeks) that a sample only of American industry had been surveyed. Nevertheless, it contains many valuable observations.

The report starts by considering the evolution of design policy. It finds that, in American firms, the initiative in laying down a development programme usually rests with engineers and that engineers are usually well represented in high management. This is certainly true but it is questionable if the right inference is drawn. In industries where techniques are changing rapidly, only men who can foresee techniques can possibly specify a product which will be competitive by the time it can be made. But where techniques are relatively stagnant, the market is governed by fashion, and prophecies of tomorrow's requirements are better made by salesmen than by engineers.

The rapid exploitation of novel ideas in the USA is always held up as a reproach (not always deserved) to British industry. Yet it is rather odd that, while in another

place the report comments on American enthusiasm for novelty, 'enthusiasm' is not listed among the factors which are relevant to this rapid exploitation. But surely this is a grave omission for the exploitation is rapid because it is eager. The factors listed may be the means but they do not provide the driving force.

The report goes into some detail on the methods of organisation which are used to secure the synthesis of design and production requirements. There is no novelty in these methods, though admittedly their application in this country is often indifferent. Here again the structure of organisations appears to have been appreciated rather than the underlying spirit. The condition which allows these methods to operate depends on the presence in both engineering and production departments of men with similar training and outlook. Too often in this country a gulf exists between the adequately educated engineers of the design department and the 'practical man' controlling production. How often an ignoramus holds his job by priding himself on being a 'practical man'! There should be complete continuity of aim and method from the earliest stages of applied research to the last stages of production design and methods engineering. "Throughout all these steps the familiar pattern of American teamwork predominated."

A point that might have been stressed is that most of the *ad hoc* teams formed in American organisations and which the visiting team noticed "sitting around in attitudes of complete informality" are spontaneously formed. That tendency to 'get together' as a matter of course has probably struck most British engineers who have spent any time in American development organisations. This teamwork, made practicable only by continuity, allows also the "great emphasis on pre-production . . . to make sure that everything is right before it reaches the factory floor". That is a vital point.

The team notes "a general awareness in the American engineering profession of the need for education of engineers in the techniques of administration". That certainly hits a nail on the head.

Everyone who has followed the evolution of an American design into production must have been struck by the meticulous care taken to ensure that last minute re-design is kept down to a minimum. The production engineers can then devote all their attention to the best methods of making an article which is already suitable for production, instead of belatedly having to complete the work of the design department. In this connection it will be noted that the normal times taken for design work, which are quoted in the report, are not short by British standards. The work is thorough and not unduly rushed.

A chapter (probably the weakest) is devoted to examples of American economies achieved by re-design. Apart from the fact that the examples are not fully enough described (and could not be in such a document) to serve as lessons in techniques, most of them are, in their first form, simply cases of bad design. American industry has not attained its efficiency by making and correcting such errors but rather by avoiding them in the first place.

Three of the members of the team dissociate themselves from its inclusion. Their stated reasons appear to be sound.

The final recommendations are unexceptionable but perhaps not quite incisive enough to get home to the unenlightened. For those who are willing to think, the report is full of ideas.

A. WHITAKER

Designers in this issue

Peggy Angus, MSIA (9). Frank Austin, FSIA (9). John Barnes, MSIA (11). William Barnes, ATD (20). Dennis Beytagh, MSIA (21). Misha Black, OBE, FSIA, M.Inst.RA (DRU) (10, 34). Gordon Bowyer, ARIBA, MSIA (9,34). Kenneth Brayshaw, MSIA (11). George Collett, MSIA (11). E. Cooke-Yarborough (23). Peter Cuddon (20). Gordon Cullen, FSIA (35). Cyril Denny (10). Robin Day, ARCA, FSIA (21). Charles Garnier, ARCA (10). Alexander Gibson, ARIBA, AA.Dip (DRU) (10). Macdonald Gill (11). John Grant, LSIA (34). Milner Gray, RDI, FSIA (DRU) (26, 27). F. M. Gross, FSIA, FRSA, Dip.Ing.Arch (28). Peter Hatch, MSIA (Art Editor). J. Christopher Heal, MSIA (21). Alec Heath, MSIA (9). F. H. K. Henrion, MBE, FSIA (Cover). F. D. Holister, MI.Mech.E, MSAE, AMIBAE (11). Ronald Homes (23). Richard Huws, B.Eng (Hons), FSIA (9). Industrial Design Development (35). Lewitt-Him (11). Raymond Loewy, SID (13). Professor Eduard Ludwig (31). J. Lunn, MSIA (34). Tom Lupton, MA, AA.Dip (21). Robert H. Matthew, CBE, ARIBA (34). T. C. Maylor, FSIA (20). A. J. Milne, MSIA (10). John Morton, ARIBA, AA. Dip (21). Ewart Myer (21). H. A. Nieboer, AMI.Mech.E, FRSA, MSAME, SID (9). Doreen Noble (21). David Ogle, MSIA (19). Sylvia Priestley, MSIA (11). Jack Procter, MSIA (11). David Pye, AA.Hons.Dip, ARIBA, MSIA (9). Ernest Race, RDI, FSIA (21, 29). A. B. Read, RDI, ARCA, FSIA (35). T. R. L. Robertson (21). Stuart Rose, MSIA (11). R. Dudley Ryder (21). H. Schoek (32). Bernard Schottlander, MSIA (35). Alick Smithers, ARCA, MSIA (9). Phoebe de Syllas (10). Mary Ward, B.Arch, ARIBA (9). Neville Ward, B.Arch, ARIBA, FSIA (9). Norman Whicheloe, ARIBA (DRU) (10). Dennis White, LSIA (10). J. K. White, MA, MSIA (34). Tapio Wirkkala (35). B. G. Yates (11).

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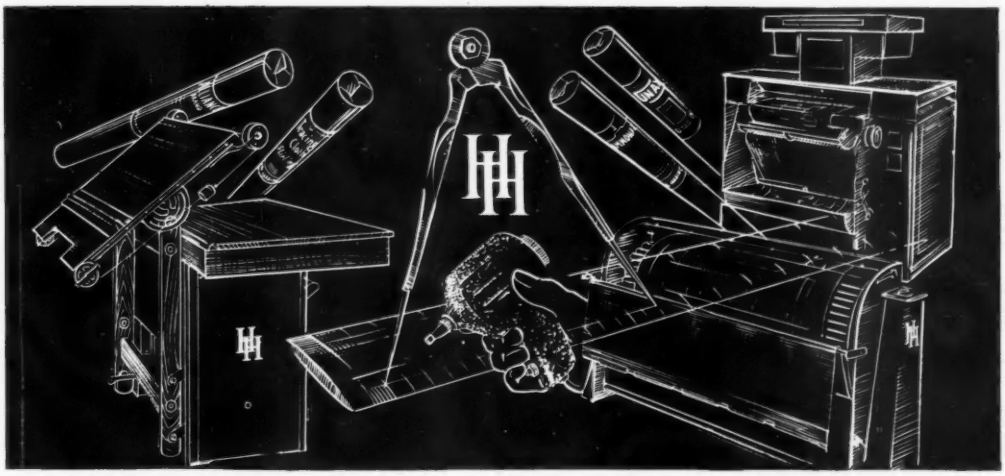

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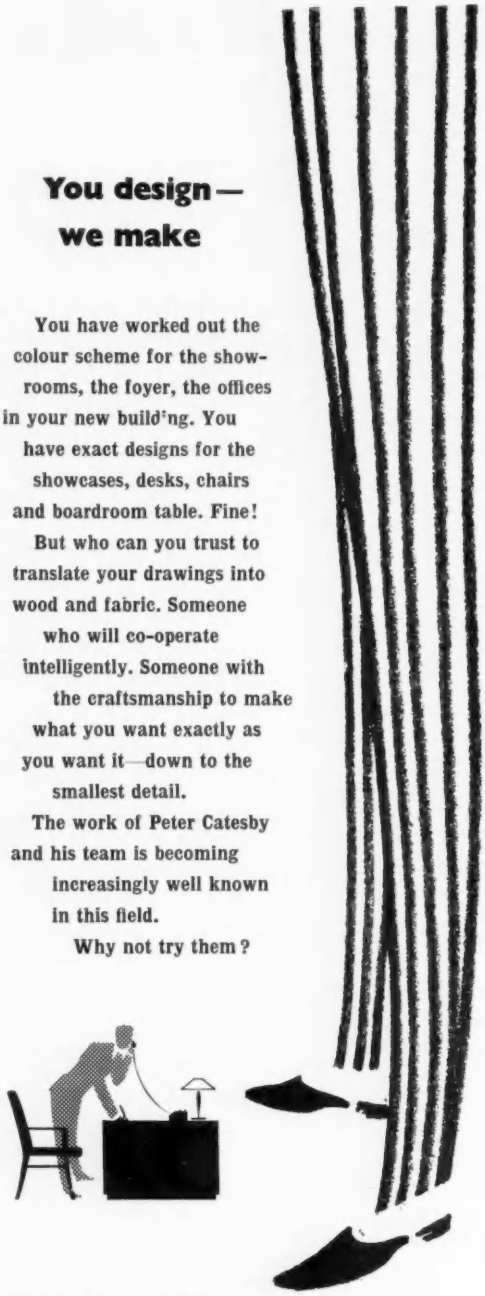

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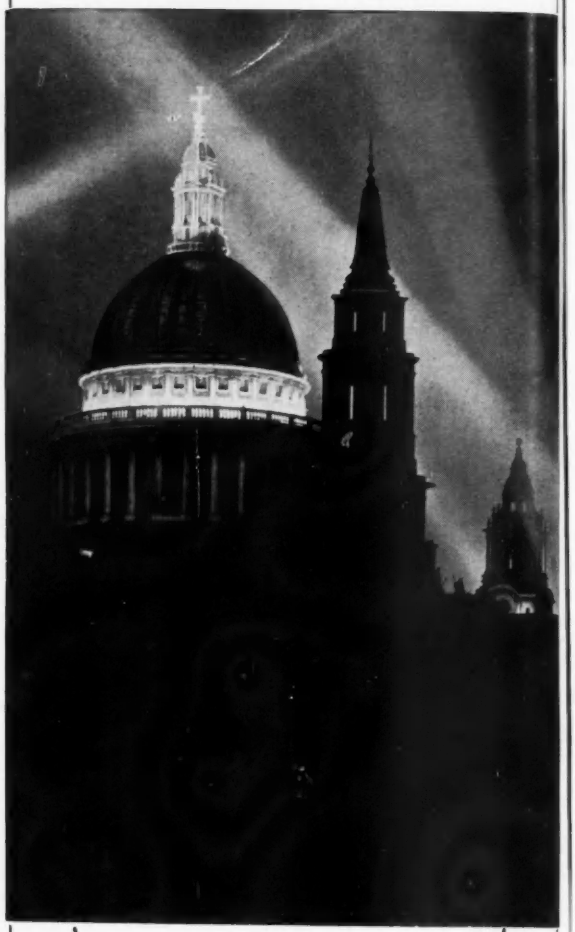

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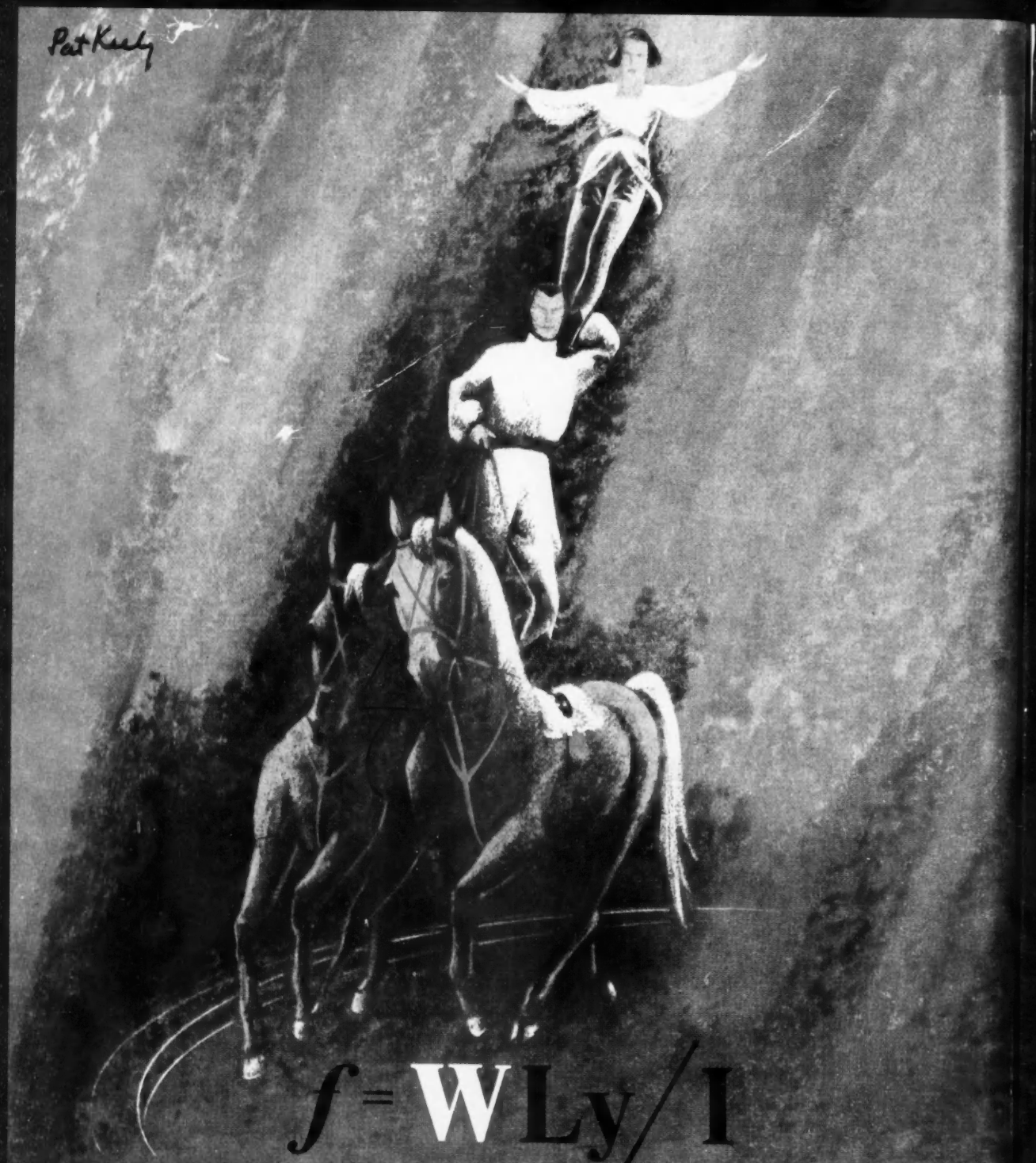

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